Introductory Address

DELIVERED AT

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GENTLEMEN,—My colleagues have entrusted to me the high and honourable office of opening our medical session to-day, and it is only fitting and right that I should commence my task by thanking them for this fresh proof of their confidence and friendship—a friendship which has lightened the labours of my long period of service in this hospital and school, and which it has been my pride to receive, however little I may have done to deserve it. It is indeed always a pleasure to me to make my appearance in this room, where so much of my active life in the work of St. George's Hospital School has been passed, and that pleasure is necessarily greater as the inevitable period approaches when my career here will be finally closed. The time that remains to me is short, even if life and opportunity be given me to fulfil my allotted service; and although I hope frequently to meet the students in clinical lectures, it is very unlikely that I shall ever again have the honour of appearing before the whole assembled school, represented as it is to-day by teachers as well as students, and by many of my old pupils and contemporaries. It has therefore been a subject of anxious thought to me how I can best occupy the hour which your indulgence allows me, and I have come to the conclusion that I shall perform my task best by speaking of that which occupies my thoughts most at the present time—the position of our profession in regard to its high aims and objects and in relation to the public, and the reforms which, as I conceive, it requires in order to fit it to attain those objects and serve the public as it ought. I do not forget that a portion of my audience consists of students who are only to-day beginning their career, but I think that the subject I have named is appropriate to them also, and it is certainly one which must be always before those of you who are more advanced in your studies, still more those on whom the burden of practice and of teaching has already been imposed. The position of our profession and the organisation of the institutions by which that position is to be maintained and advanced, is a matter which surely concerns us all—the youngest student who joins us to-day, as well as those who, like myself, have nearly run their course, and who are looking forward in no long time to "seek the chimney nook of ease," and "there ruminate with sober thought on all we have seen and heard and wrought."

I should be sorry, however, to turn to the topics which I propose to submit to the judgment of the senior members of my audience without saying a few words of welcome and encouragement to those who are joining us for the first time to-day. I need hardly say that I think you have made a wise choice of your future profession; for though Medicine is a hard mistress, insisting on the unremitting devotion of your whole energies, and, as Johnson said, involving "a continual interruption of rest and pleasure," still, to those who devote themselves heart and soul to her entire service she gives rewards far more satisfying than titles or money. Though even in respect of its material results I do not join in the deprecation of our profession which we so often hear, a man who follows it with assiduity and a fair share of intelligence, and who avoids all dissipation, is nearly sure to be able to live by it. And of what other profession can so much be said? Very large fortunes may not be amassed by medical men; but an honourable competence will hardly fail to accrue to him who has fair health and average good fortune, and who avoids the common imprudence of marrying before he can afford it, and burdening himself with speculative expenditure which his income does not justify. So much for money. As to titles, my own opinion is that we have enough of them; but if anyone thinks that it would be a proud day for medicine if some great doctor were raised to the peerage, I see no improbability in the event. The old monopoly of honours by the land, the law, and the sword is breaking down. Authors are being admitted to the Upper House, and doctors may get there in due course. I doubt if they or we will be much the better for it. But the real charm of the profession does not lie in the making of money, or in the shadowy prospect of honours: it lies in the endless variety of its objects and in the unfailing interest of its every-day round. To a physician or surgeon worthy of the name there is a double interest in every case he is called on to treat—the human interest which he feels in the patient, and the scientific interest which he feels in the disease. The interest in both is enthralling. No doubt, however, the human interest and the human affection, which you cannot help feeling for your fellow-creatures as you watch them struggling with the direst calamities of life, must be the more ennobling; and it is on this chiefly that you will have to feed your mind. You will learn as you advance in your profession that happiness is not confined to the prosperous, nor heroism to the distinguished; that a poor ignorant man can face suffering and death with an equanimity which philosophers often fail to display; that men and women may be serenely happy and tranquil, though their existence is a monotony of pain; and that death is often looked on more as a friend than as a terror. You will learn, I think, if you reflect well on what you see, to distrust the philosophy which teaches that the mind is a function of the body; and, at any rate, you will be convinced that pain is not the worst of evils, nor death the greatest of calamities. Mingled, no doubt, with much that is mean and pitiful, you will come across scenes of unostentatious courage and of devoted affection which cannot fail to raise your opinion of men and increase your love for your kind, and you will be repaid by the gratitude and affection of many to whom you have been useful, and will feel in your degree the happiness of the patriarch of old: "The blessing of him that was ready to perish came upon me, and I caused the widow's heart to sing for joy." And if, when looked at in its social aspect, the practice of medicine is so rich in the rewards it bestows, it is hardly less rich in scientific interest. No doubt to the general public it seems both barbarous and grotesque to talk of the most repulsive infirmities and the most agonising suffering as "interesting" cases. Yet no one can doubt the absorbing interest with which we study the processes of disease, or the still more intense anxiety with which we watch the success or, alas! too often the failure of our efforts to arrest them. In fact, apart from such interest, no one could labour amongst such agonising scenes and in such horrible surroundings. It is the peculiar glory of medicine that it adds to the delight which attaches to every branch of the scientific study of nature the far higher delight of sympathy and charity. The chief drawback to its pursuit is the labour which it entails—a labour never ending, and which leaves its victim no repose, literally, day or night, and under which men are apt to degenerate into mere business machines, and to care for nothing except their profession. No doubt this is a less evil than the listlessness which follows on idleness. Still it is an ignoble condition. It deprives a man of all power of companionship with the world at large, and shuts from his eyes many of the sweetest and loveliest things of life. It makes a man the slave instead of the master of his business, and confines his mental faculties to a groove in which they wither, so that business itself soon becomes a dull routine. The best antidote to this tendency is the cultivation of a taste for some worthy object which can be trusted to assert itself even against the claims of business. The best of all such tastes seems to me to be that for literature, a taste which can be indulged in under any circumstances short of actual acute disease, and at any time of life—nay, which often becomes keener and stronger in age. I would also recommend you to cultivate the great and lasting possession of conversational power, which has its advantages over reading in being social and more unselfish. The art of conversation is said to be decaying; the more the pity, for it is a grand art as well as a most delightful accomplishment, and to a medical man who has to associate with every kind of person in all kinds of circumstances it is almost a necessity. But whatever may be your taste, so that it is innocent and healthy, cultivate it while you are young, and it will help you to resist the pressure of business when you are old. I do not wish to encourage you to waste your time as students. You have, in fact, not an hour to spare;

but healthy recreation wastes no time. No one can study profitably without a large allowance of total rest and change, and in those happy hours it is well to mount your hobby, if only a tricycle, and drive him fearlessly along, forgetting that there is such a thing as anatomy or surgery. You will be none the worse anatomists or surgeons in the long run. I well remember in my time at Cambridge two successive senior wranglers who were as prominent on the river as in the Senate house. A man who is nothing but a doctor is not generally first-rate at that.

Our younger students may well be congratulated on the position which has been acquired by the profession on which they have now entered. We, who have lived through it, hardly realise without some effort of mind the enormous progress which our art has made in the years comprised by the active professional life of men hardly beyond middle age. Men talk of the wonders of electricity and steam—of the benefits bestowed on life by all the mechanical inventions of the day; and with reason. They have transformed our daily life, and familiarised the poorest with luxuries which had been out of the reach of monarchs. But all the wonders of mechanical science are poor compared to that of anæsthetics, and no luxuries which modern science has put into our power can for a moment be compared with the immense saving of human life and diminution of human suffering produced by the more rational and successful methods which have prevailed, and are still gradually extending themselves over the whole field of modern medicine and surgery. We, who are surgeons, can perhaps best estimate this wonderful fact from the success of our operations in the present and in the past. Here most of us would be inclined to agree with my late friend, Mr. Callender, that the risk of the mere surgical procedure has diminished tenfold, and that operations which in my young days would have been scouted as the follies of a madman are now undertaken as matters of every-day routine. But, fortunately, it is only a small proportion of the human race who are exposed to the sufferings and dangers of the great operations of surgery. In medicine also a similar progress has been attained, though not, I believe, to so great a degree; for medicine has not been favoured by great discoveries such as that of anæsthesia, or wide-reaching theories like that of antiseptics. Still, the extended study of pathology and chemistry, and the more accurate knowledge of the functions of the body in health and disease which modern physiology has given us, have placed our physicians in a position far different from their fathers, and have emancipated them from that bondage to imperfect theories and traditional practice which caused so great a havoc in old times. Still more important to the public, and still more peculiarly the property of modern times, is the growth of preventive medicine, by which already our great cities have been raised to a condition of healthiness such as the healthiest parts of the country could not boast in former days, and by which we may hope in no very long period that the great epidemics which still ravage the world will be bridled, and, in civilised countries at least, be gradually extinguished.

On the whole, I do not doubt that if some future Buckle shall resume his predecessor's mighty task and attempt to write again the history of modern civilisation, he will allot to medicine one of the foremost places among the progressive sciences, and will allow that the medical profession have established their claim to consideration as among the most active benefactors of the body politic. It is to such a profession that we welcome the new students of to-day, and it is to them and such as they that we commit its future, secure that the great work will not stand still, but that there will be even better men in the future than those who have left their mark on the past—and not without a hope that, as in the past, a good share of that progress will be attributed to the physicians and surgeons of the school we love so well.

Let us now turn to consider the institutions by which the organic life of this great profession is carried on in England—the medical schools, the hospitals, and the corporate bodies which preside over our professional life. We shall find much to praise in all of these. How else could the progress which I have rapidly sketched have been attained? If I find much also that I would willingly see altered, I hope you will bear with me if I point out freely those defects. I shall do so in no depreciatory or carping spirit, but with the good-will of a man whose chief distinction has been that he has been thought worthy to bear his share in the government of institutions of all these three classes, and who earnestly desires to increase their vigour and usefulness. I am, I hope, as far as possible from that foolish thirst for novelty which condemns an institution merely because it is old. But times change, and if we try to stand still we must be left behind. It is only by constant change that the England of to-day has been developed out of the polity of the Saxons and the Normans; and it is only by admitting such changes as are indispensable that the institutions devised in the days of our forefathers can be adapted to the greatly changed position which, as I have shown you, modern medicine occupies. So much everyone allows, and you will perhaps call it a truism; but when we come to apply it and point out here and there where we think changes are necessary, I fear our unanimity will come to an end.

1. We will speak first of our schools; and here I will restrict myself to England, for I am not sufficiently familiar with the Scotch and Irish schools to speak with confidence of their organisation. The main excellence, as it seems to me, of these our hospital schools is, that most of them are officered by men who have been brought up in them together from their early years, who have derived their education from the same source, and who have the same traditions, the same eponymous heroes, as the Greeks would say. Speaking of surgery only, it is no small thing that St. Bartholomew's should regard itself as the school of Abernethy and Lawrence; that Guy's should look to Cooper and Key; that St. George's should be associated with the undying names of Hunter and Brodie. These great traditions give a unity to the teaching and an *esprit de corps* to the teachers, which we should look for in vain in a school presided over by a body of professors, however eminent, nominated by a central authority, and owning no ties to each other more tender than those which bind together the partners of a commercial firm. Such *esprit de corps* reacts upon the students. Any man worth the name who enrols himself here feels that he is in his degree bound to support the traditions of the school; if he cannot imitate the profound research of Hunter or the clinical acumen of Brodie, he can, at any rate, imitate in his humbler way the perseverance which they did not think unworthy of their great genius; and he can remember, and so bear himself as to make others remember, that from our predecessors and from our own contemporaries we have inherited traditions of honour and self-respect which our youngest as well as our oldest members are equally bound to follow. I would point out to you as an example of what I mean the great surgeon who has so lately passed away from us full of years and honours, endeared to those who had the happiness of being his pupils by every tie of gratitude and affection, and reverenced by all who can appreciate stainless honour. Cæsar Hawkins was rich in friends who watched and tended the peaceful close of his long and brilliant career; they saw how well he bore Horace's test of a well-spent life—"Lenior et melior fis accedente senecta?" The words of Scripture involuntarily occur to everyone who contemplates an old age so full of dignity and goodness: "The path of the just is as a shining light, which shineth more and more unto the perfect day." It is, then, by private enterprise, by the association of colleagues and friends, that these great schools have been founded and maintained, and this seems to me to be their first and great excellence. I do not deny, however, that private enterprise has been carried to excess in the medical schools of London, and that if their number were diminished it would be a benefit to medical education. The question which is to be sacrificed first is a delicate one, and obviously one which I cannot discuss here; but it will, I have no doubt, receive a solution from outside before many years are over. A good school requires many things which can hardly be furnished by an institution just struggling for existence. The means for teaching must be ample; the staff of teachers must be experienced and competent; the premises must be appropriate; but, above all other things, the supply of hospital cases and the opportunities given to students for hospital instruction must be on the most liberal scale. There are many famous and flourishing institutions in other countries where this last and most necessary requirement is sadly overlooked. You meet someone returning, we will say, from some German school—for all the young men of the present day go to Germany, as those of my younger time went to Paris. He will tell you of the profound discourses of Professor this and the interesting demonstrations of Professor that, of the crowds that follow these eminent men through their wards, and the brilliant operations he has witnessed. If you ask him, "Did you ever watch the

results of the treatment? Had you any share in the practice? Did you learn anything that will assist you in your every-day work when you take up your daily routine?"—you will *often* (of course I do not say *always*) find that the precious time which should have been spent on acquiring a familiarity with every-day matters has been wasted in theorising or in watching other people doing what the student himself will probably never have occasion to imitate. Many can describe accurately the steps of the operation for excising the pylorus or extirpating the larynx who would make a horrible bungle in trying to reduce a hernia, and have, perhaps, never passed a catheter in their lives.

I am told that young men have ceased to read Milton. I am sorry if it is true, for there are few great authors so truly delightful. To acquire in your youth an intimate knowledge of, and love for, the great authors of your own and other tongues, is to provide "a perpetual feast of nectared sweets" for your old age. There are a few lines in "Paradise Lost" which I hope will remain in our memories, and which might fitly be inscribed over the portal of every medical school in the kingdom:—

> "Not to know at large of things remote
> From use, obscure and subtle, but to know
> That which before us lies in daily life
> Is the prime wisdom. What is more is fume
> Or emptiness, or fond impertinence,
> And renders us in things which most concern
> Unpractised, unprepared, and still to seek."

To our students I would say: "Judge of the merits of your school, not by the renown of its teachers, not by the excellence of their lectures, not by any thaumaturgic proceedings you may witness in the operating theatre, so much as by the opportunities given you, if you choose to make use of them, to familiarise yourselves with the daily round of practice, and to take your share in it. In this most essential particular I venture to think that the schools of London stand foremost in the world, and I hope that the one in which we are now assembled is not behind its fellows.

Having said so much of the merits which I claim for our London schools, may I say a word about what I consider their defects. I think they may chiefly be summed up in these two particulars: first, that our teaching of the preliminary sciences—the bases of all medical knowledge—has of late tended to become too theoretical; and, secondly, that these sciences have been too far separated from the more strictly practical part of the teaching. This subject is intimately connected with the regulations of the examining bodies, a topic which I shall handle presently; but the result seems to me grievous. So occupied are most of our students in "cramming" for what in the mock English of the present day are called "exams." that they appear to have forgotten that the subjects are matters of human knowledge—matters replete in themselves with the highest interest, and fit to form a part of the furniture of a man's mind for the whole of life. How rare is it now to hear a student talk of "learning" anything. He is "getting it up"; and when he has got it up and it has served its purpose he drops it again as rapidly, and a few months after he has passed a brilliant examination knows almost as little of the matter as he did before he commenced his work on it. It is this that constitutes the difference between cramming and learning, that the first contemplates a temporary purpose and the second a life-long use. No doubt much could be said against the old system of teaching which prevailed in my day, and against the single examination at the end of the whole curriculum, but it had, at any rate, this merit which the present method has sacrified, that it presented the whole of medical education. What used to be called the institutes of medicine, as (what it really is) a single subject, no part of which ought to be separate from any other, and all of which ought to be present equally to the students' mind at the end of his career. I know not how to advise you to remedy this. The regulations of our schools and examining boards make it practically impossible to continue the active pursuit of anatomy and physiology after the primary examination in these subjects is passed, except in the case of those few men who have more than the usual period to devote to their studies. The ultimate cause of the defect is probably in the fact that the period of study is too short. I can only hope that some day this may be remedied, and that when it is so, the examining bodies may see their way to insist on a re-examination at each successive stage in all the subjects presented at a previous stage of the course. Till this is done the present perfunctory study of these great subjects must I fear continue to be the rule, a rule which will allow fewer and fewer exceptions to its monotonous tyranny as it becomes more firmly established.

2. From the school to the hospital is an easy step; and fortunately, in London at any rate, the two need never be separated by any zealous student. Practice—hospital practice—should be the basis of all your studies, the source from which they flow, the test to which they are every day referred. No reading of books, however good the books may be, and however well you may read them; no listening to demonstrations, no matter how striking or eloquent, will make any one of you a competent physician or surgeon. Every line you read, every lecture you hear, should be tested by the living illustrations which our wards furnish to you in such abundance; and to provide such illustrations and such instruction is one of the chief functions of our great hospitals, and one of their most important public benefits—I had almost said absolutely their greatest. Hospitals are regarded by the public almost exclusively as places for the relief of the sick, and their function in medical education is usually passed over as a "doctor's question." Surely no mistake can be more glaring. The relief of suffering and the cure of disease are, of course, the primary object of a hospital—and in those hospitals which have no medical school attached it is their only function; but consider for a moment how inferior in importance to the public and to humanity in general is the relief thus administered to individuals, compared to the saving of pain and of life involved in even one of the many discoveries made in our hospitals, and constantly propagated and enlarged by the improved teaching founded on them. What, for example, was the relief afforded to individual sufferers from popliteal aneurysm in all the hospitals before Hunter's time compared with the effect of the discovery which he made in this hospital with regard to its treatment? The first ended with the individuals treated; the second has gone on continually improving the treatment of that formidable malady to an extent which Hunter himself could never have dreamed of. I believe the public will get to see the truth of this in a little while, and will understand that the clinical investigation of the cases by the staff and the students is not only necessary, but is in the highest degree beneficial to the patient himself as well as to the public. It is to me pitiable to think of the mass of material for clinical instruction which is allowed to be wasted here in London—to say nothing of the country,—and of the small period of their curriculum which our students pass in what ought to be their chief employment—work in the wards. Something of this is due to the separation, every way to be deplored, which accident has caused between the hospitals so-called and the dispensaries and infirmaries. These latter ought to be dependent portions of the same institutions as the hospitals, and equally accessible to the students—or rather equally parts of their compulsory clinical instruction. Consider the difference which has been made in the education of a medical student by the abolition of the apprentice system. A great number of students now pass through their course and obtain the diploma without any personal familiarity with the management of the case. How can they come afterwards into practice without finding themselves, in Milton's words, "in the things that most concern, unpractised, unprepared, and still to seek"? How great an advantage would it not be if time could be found for students, as a part of their curriculum, to take personal charge of dispensary and infirmary cases, and so familiarise themselves with the routine duties of actual practice—duties so important to the practitioner, so necessary for the patient, yet which hardly can be confided to the personal care of students in our hospitals as at present constituted. I have spent much time and labour, hitherto in vain, in trying to persuade the public and the profession that our hospitals ought not to be isolated institutions, as they are now, completely separated from the infirmaries and dispensaries, holding no communication with them, receiving no patients from them, and giving them no assistance; but that the hospitals ought to stand to the other medical institutions in somewhat the same relation as consulting practitioners do to the medical men of their neighbourhood, receiving some patients from them for opinion, others for treatment, and giving them in return all the assistance they require, amongst which the services of their medical students in visiting the patients and taking charge of their cases, under the superintendence of the medical officers of each institution, would be one of the greatest use to both parties. I am aware of the

difficulties in the way of such a scheme, but I regard them all as subordinate to the great initial difficulty of the shortness of the present curriculum. If this could be extended, I see no reason why a part of the time so gained should not be given up to a properly regulated attendance on patients at their own houses or in infirmaries. Another and hardly a minor advantage of such a federation of our medical institutions as I have hinted at would be that it would almost necessarily entail the reform of our present out-patient system. But on this well-worn topic I must not detain you. My views upon it are well known to those who trouble themselves about them, and I do not care to feed you on *crambe repetita*. All I need say is that at this hospital we have, at any rate, so far succeeded in checking the tendency to indiscriminate reception of out-patients that our assistant physicians and surgeons are able, without neglecting their duty to the patients, to use the abundant material which the out-patient room supplies for the instruction of the students; and I need not tell those who know these gentlemen, as most of you do, that what they are able to do they do most heartily and efficiently, and that the student will pass some of the most valuable hours of his day in following the cases of the out-patients.

I wish I had time to treat of an important topic in regard to hospitals, and one to which in medical circles too little attention is paid. I mean their method of government. Happily, the matter is one which requires the less notice in this place, since the constitution under which we live at St. George's seems to me perfect, and it would be invidious to illustrate its merits by reference to the misfortunes or errors of those of our neighbours who are less happily circumstanced. That constitution is a pure republic, where the lay and the medical men vote and debate equally and openly, and it has resulted in a condition of mutual goodwill and good offices between the hospital and school which is of the highest advantage to both. I need not say, gentlemen, that much of this happy result is due to the personal qualities of those who preside over the affairs of the hospital; and I am glad to see our worthy treasurer, Col. Haygarth, here to-day, and to assure him, on behalf of my colleagues and myself, how fully we appreciate the unfailing consideration and help which we receive from him and from the Board of Governors, and how sincerely we thank them for it.

3. I now come to the third and most difficult part of my subject—viz., the consideration of those great institutions through which chiefly the profession communicates with the public departments, and through which its internal regulation is, or ought to be, carried on, and by which the rules for our medical curriculum and examination are settled—I mean the licensing bodies and the Medical Council. Now, here I find myself in rather a peculiar position. I have served the College of Surgeons in various offices, and always with pride and affection. It is a great and noble institution—one that has done great things for the profession, and has deserved nobly of it. Those who charge the College of Surgeons with selfish aims, and with administering the affairs of the profession with a view to the private interests of its own Council, do so in entire ignorance of the subject. Such charges may serve to spice a newspaper article, but to those who are acquainted with the management of the College they are ridiculous. During the many years I have sat on the Council I never knew any subject connected with the examinations or the *personnel* of the examiners debated or settled with reference to anything except the perfection, as far as possible, of the system; nor do I believe that any examination in the kingdom has made greater progress towards efficiency than has that of the College of Surgeons since my student days. I do indeed greatly deplore the cutting up of the examination into separate pieces. The separation of anatomy from physiology I consider a grievous mistake both in theory and practice, and I resisted it as long and as vigorously as I could. I also think, as I said before, that the entire separation of the primary from the pass examination is a mistaken system. But I stand in a small minority in thus thinking. The Medical Council, the College of Physicians, and the great bulk of the authorities outside the College would have it so, and so for the present, at any rate, it must be. Leaving this aside, just consider for a moment the difference between the present membership examination at the College and that which prevailed when Brodie and Lawrence were examiners. The present examination is looked on as a difficult one. Yet I do not think it is so to those who approach it, as a practical examination ought to be approached, through the avenue of honest and continuous practical work in the dissecting-room, the laboratory, and the wards. It is indeed difficult to get it up by "cramming," and the lamentable fact that so many students try that plan accounts for the equally lamentable result that the percentage of rejections amounts, I believe, to something between a quarter and a third at most of the examinations, and in some reaches a still higher proportion. I have no doubt that anyone who dispassionately examines the question, with a fair knowledge of the condition of things at different periods, will agree with me that the College of Surgeons, in its dealings with medical education, has acted vigorously and wisely, and has learned the gratitude of the profession, of which it is the leading educational institution; and I do not doubt that in its degree the College of Physicians is entitled to a share of the same praise.

Having said so much as to the excellences of the Colleges, I am compelled to say that, notwithstanding all their eminent services to the profession, these great institutions are not so organised as to do all they might for the service of the public. State medicine is coming every day into a more prominent position as a branch of general policy. Where are the medical advisers of the State, and who are they? All that we see in public leads us to conclude that medical questions are settled less on medical considerations than by a reference to popular clamour or the pressure of contending interests. Meanwhile the great Colleges of London are never consulted, except on some merely trivial point of administrative business, nor is their influence on any political question, such as a Medical Act, in any proportion to the number and intelligence of their members. There seems to me to be two reasons for this very undesirable state of things—the defective organisation of the Colleges, and their want of union. The College of Surgeons is organised on the model of a City company; in fact, for some time it was governed by a master and wardens, exactly as a company is, and though the names of the functionaries have been changed, the essence of the government remains the same. Such a constitution, in which the master or president changes every year, reduces his power, and with it that of his council, to a minimum, and causes the secretary or other non-professional officer to be the most important authority. The result is fatal to the public influence of the College, and also binds it down inevitably to an unreasoning conservatism. The influence which the general body of the profession, the Fellows and Members, ought, in all reason, to exert on the deliberations of the council and the government of the great institution which derives its lustre from their numbers and achievements, and its very means of existence from their contributions, is altogether excluded. I have no doubt whatever that the administration of this great College, if it should still remain as a separate institution, must, and ultimately will be, reformed in these particulars. Of the College of Physicians I would say the same, so far, that it affords too little scope for the representation of the general opinion of its members, and in that respect requires reorganisation. In other respects its constitution seems to me much superior to that of my own College. The president is a more permanent officer and has more influence on the course of College affairs; the Fellows meet in conclave; the administration is in professional and not in lay hands. But this question will inevitably occur before long—why these great bodies remain separate. They have at length, and, as I believe, with most happy augury, seen the desirability of union for the purposes of examination; why should they not be united into one great institution, which would become the Medical University (if it could so be called) for England and possibly the British Empire, through which the profession could communicate with the State and its various departments, and which could regulate all the various and intricate questions which are constantly cropping up with regard to the curriculum of education, the visitation of schools, the management and results of examinations, the titles under which men practise, and the methods which they employ to obtain practice? All these questions, and others of a similar nature, are now placed in the hands of the Medical Council, an august body, of which the profession knows little more than this—that though composed of the most eminent men, and animated by the best intentions, it has not hitherto done much towards the solution of these problems. Again, I take the reason to be that the organisation of the Council is faulty, if it is intended as an instrument for action. For *deliberation*,

indeed, nothing could be more appropriate than a body composed of the *élite* of the profession, taken from all parts of the British islands, and elected by the Crown, or by public bodies with all possible diversities of situation and interests; and of deliberation there is certainly plenty in the Council's proceedings. But the diversity of the interests which the members represent, and of their origin, effectually prevents any definite action. Some more efficient machine must be provided, and one animated by a more powerful motive force. Now this machine can, as far as I see, be found only in some such institution as I have spoken of, formed by a combination of our great Colleges and the *motive force*. Where are we to find that? I should reply that it will be found in some more popular organisation—more *democratic*, if I may use that now fashionable term. I do not mean that the government of the College ought to be put into the hands of the Members; I am not so democratic as that; but I hope to see the day when the Members as well as the Fellows will have a voice in the election of the Council and of the president, and when on all important matters the constituency of the College or of the united Colleges will be consulted. That constituency, we must recollect, is not composed of handicraftsmen or agricultural labourers, but of professional gentlemen perfectly acquainted with the wants of the profession—nay, much better acquainted with many of them than those who are called its "heads," and the expression of whose opinion, could we find a means of eliciting it, would strengthen the authorities in a way no other force could do. It is not, then, in a spirit of hostility to the Colleges, but, on the contrary, with the sincerest desire to promote and extend their sphere of usefulness, that I advocate a change in their organisation, which in fact I regard as almost certain to be brought about in one form or another. The object which I have in view is the formation of a great institution which can worthily represent the medical profession in England, and through which the profession can pronounce its opinion with an authority which can only be possessed by a comprehensive and self-governing body. No one, I think, will deny that there are plenty of subjects upon which the voice of the profession could be pronounced decisively and to the great benefit of the public as well as their own. The present *régime* of "happy-go-lucky" has left us in a position equally unsatisfactory to both parties. If we look at the profession, we see it oppressed on all sides by so-called "charities" which eat up the means of living of the general practitioners, while the good that they do to the public is, to use the mildest term, problematical; we see public appointments remunerated at a rate below starvation, yet eagerly sought after in order to keep out competition from the field of private practice. If we look at the public, we see them the victims of every fresh folly and delusion which it may suit the restless ingenuity of quacks to palm off upon them. and we cannot help admitting that there are many members of our own body whose diplomas may be perfectly regular, but whose practice is hardly to be distinguished from that of the avowed quack. Coincidently, in fact, with the enormous strides which the art of medicine has made, we see this fungus of quackery growing more and more luxuriant. I do not say that a strong and prevalent central authority would reform all this. You can no more make men honest by authority than you can make them religious by Act of Parliament. But, at any rate, it would be easier to detect, and if not punish, at least rebuke, infamy, if there were such an institution as I have imagined, and the materials for which lie so ready at hand if we could but combine them. Think of the chaos in which all such matters are now weltering! There are plenty of very good schools and plenty of very bad ones. But there is no central authority which has the right, and will exercise it, of visiting them, independent enough to be trusted to distinguish the bad from the good, and powerful enough to enforce on the former the alternative of reform or dissolution. There are plenty of good hospitals, organised for the service of the public and the spread of medical education, but they are oppressed and stunted in their growth by a crowd of institutions which are organised, not for the service of the public, but for private ends, and which, far from spreading medical education, draw off from our great medical schools many of the cases which would be most useful for clinical purposes; but there is no central authority to guide the public to discern the one from the other. The public service is starved and the poor are ill attended in consequence of injudicious parsimony; yet there is no central authority to pronounce decisively on the bad policy of the employers and on the unconscientious greediness of the employed, and so defend the poor, who are the victims of the system, against both. The indiscriminate abuse of medical charity is eating out whatever of manly independence may have been left in our poorer classes, and is at the same time rendering the struggles of the general practitioner more and more severe; yet there is no central authority which could give a decisive opinion on all this, and rescue the public from a state of things as dangerous to the body politic as to the interests of our own profession. Men of good education and of sound experience—licentiates of our great Colleges—complain that any young jackanapes can go away to some trumpery university, and return with a degree enabling him to pose in the eyes of the public as their professional superior; and there is no central authority to stop this nefarious traffic, or even expose its real nature. Such are a few, and only a few, of the uses to which my fancied central authority might be put. Your own experience will easily supply plenty of others. And it does not seem to me at all unlikely that some such combination as I have hinted at may be arrived at sooner than perhaps we now expect. The union of the two Colleges for examination purposes is a very striking and a very pregnant fact. But one thing, at any rate, we can all do; for we are all Members either of the College of Physicians or Surgeons. We can, if you think with me, labour in every way that seems prudent and feasible to obtain for the Fellows and Members of these Colleges the rights to which their intelligence and their social position entitle them in their own College; and so, if we cannot change the institutions which exist, we can at any rate hope to reform and strengthen them. In doing this I am sure we shall be rendering equal service to the public and to this the most energetic and the most progressive of all professions.

Gentlemen, my task is done. I only wish I could have executed it in a style more worthy of my great theme. These few minutes, however, will not be thrown away if I have succeeded in arousing in any degree in the minds of the junior students an idea of the greatness of the calling on which they are now entering, of the services which it has rendered to humanity in the recent past, and of the far greater services to be expected from it in the near future; if I have impressed on the more advanced students the conviction that success in their studies is only to be sought by constant personal familiarity with the actual facts of practice; and, still more, if I have in any degree stimulated my colleagues to a resolute determination that they will attempt to place the organisation of our professional institutions on a footing more worthy of the rapid advances of medicine in public estimation and public usefulness. I need hardly say that my own share in any such attempt must necessarily be a very short and a very humble one; but I should be indeed glad if I could think I had done anything towards that brighter future that awaits the great profession to which I have dedicated all the active years of my life. I am sensible that I have only touched on the very surface of my subject; but I trust to your indulgence to forgive my deficiencies, and to your intelligence to supply them. To handle such a theme fully would require not a speech, but a treatise, and even then the matter is one rather for action than for words. I confidently hope to see many of the deficiencies which I have noted in the present state of things remedied in no long time, and that is because I look confidently to the energy of the rising generation of medical men to enforce the reforms which are needed. With all good wishes for your progress in your studies, and for the success of the noble school in which you commence them, I wish you all heartily farewell.

A PRIZE FOR A NEW INSTRUMENT FOR THE IMPROVEMENT OF HEARING.—Baron Leon de Lenval, of Nice, has offered a prize of 3000f. for the best readily portable instrument, constructed according to the principle of the microphone, for improvement of hearing in cases of partial deafness. The award committee consists of Professor Hagenbach-Bischof, Chairman (Basle), Dr. Benni (Warsaw) Professor Burckhardt-Merian (Basle), Dr. Gellé (Paris), and Professor Adam Politzer (Vienna), to any one of whom instruments intended for competition may be sent before Dec. 31st, 1887. The awarding of the prize will take place at the Fourth International Congress for Otology, to be held at Brussels in September, 1888.

A CLINICAL HISTORY.

CASE OF SCARLET FEVER, COMPLICATED WITH NASAL AND PHARYNGEAL DIPHTHERIA; ACUTE SUPPURATION OF BOTH MIDDLE EARS; RAPID DESTRUCTION OF TYMPANIC MEMBRANES; SERIOUS LOSS OF HEARING; FACIAL PARALYSIS; AND ABSCESS OF LACRYMAL SAC; RECOVERY.

BY THOMAS BARR, M.D.,

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B. M——, a girl, aged four years, of healthy constitution, was attacked by scarlet fever on Nov. 29th, 1883. She contracted it from her brother, fifteen months older, who had been suffering for a fortnight from a somewhat mild form of the disease. The boy took ill in the country, and the girl was removed to Glasgow as soon as it was seen that her brother had fever. Twelve days intervened from the time of separation before she was seized with the malady, the infection having apparently been carried by a third person; and within fifteen hours of her seizure she was reconveyed to the country, where her little brother lay ill, and placed under the care of Dr. Hay of Maryhill. During the first week the disease pursued a course more severe than in the case of the boy, although presenting no alarming symptoms. The rash was abundant, the throat affection moderate, and there was but slight swelling of the cervical glands. There was, however, very considerable delirious excitement at night. The treatment during this period consisted mainly of frequent sponging with tepid water, and the administration internally of chlorate of potash and diluted muriatic acid. At the end of the first week the temperature fell very decidedly, and the crisis of the fever seemed to have been satisfactorily passed.

This improvement was, however, of but short duration, for, at the beginning of the second week, the temperature again rose as high as 105°. Coincident with this rise of temperature, there were marked symptoms of nasal catarrh, the nasal passages becoming much obstructed, and a thin irritating discharge began to exude from the nose. The child also complained of the throat, and the glands of the neck were seen to be more enlarged. However, as examination of the throat revealed at first no more than some increased swelling and redness, it was hoped for a time that this marked aggravation of the condition was due to nothing worse than a simple nasal and pharyngeal catarrh.

In a few days, however, Dr. Hay suspected the real nature of the complication to be nasal diphtheria. This view was confirmed by Dr. Finlayson, who was called in consultation at this stage, and soon it was made only too manifest by the appearance of distinct diphtheritic patches on the soft palate, tonsils, and posterior wall of the pharynx, extending evidently into the naso-pharynx and nasal passages. The nasal obstruction and the increasing swelling of the throat caused great distress in breathing. Large quantities of stringy, viscid, and dark-coloured mucus also constantly collected in the mouth and throat. Tincture of steel and chlorate of potash were now prescribed. The nasal passages were regularly syringed with a solution of chlorate of potash. The stringy viscid mucus was also frequently washed out of the mouth and throat by means of syringing with a warm solution of chlorate of potash. Efforts were also made, though not very successfully, to spray the nasal passages and throat with a solution of lactic acid. A strong solution of nitrate of silver was on several occasions applied with a brush to the patches in the throat. Minute attention was also devoted to the nutrition and stimulation of the child.

Towards the end of the third week her condition was in the highest degree critical, chiefly by reason of the determined resistance which she now offered to the taking of nourishment either in the solid or in the liquid form. The teeth were so tightly clenched that it was necessary to force open the jaws with the handle of a spoon. As a consequence medicines had pretty much to be abandoned, while it was possible to introduce nourishment only by injecting it in the liquid form through an ivory tube inserted between the teeth. After continuing this method of giving nourishment for a few days it had to be abandoned, not only on account of the terrible struggles which the efforts to separate the teeth involved, but because it was found that although the liquid was injected into the throat it was not swallowed, either passing out by the nose or returning by the mouth. It was remarkable that although the child was in a state of great prostration she showed extraordinary power in resisting the separation of the teeth. Nutrient and stimulating enemata were now resorted to, and no further efforts in the meantime made to feed by the mouth. For two days or thereabouts the bowel retained the nutrient enemata, but after that they came away immediately after being injected.

At this time—towards the beginning of the fourth week—the child's condition seemed so critical that the friends and medical attendant regarded a fatal issue as almost inevitable. At this crisis Dr. Finlayson, who had already seen the child thrice in consultation, suggested that while we should refrain from forcible efforts to give nourishment or medicine, we should, as the child lay prostrate on her back, pour a few drops of cold water on the clenched teeth, so that the water might gradually permeate through between the teeth, and from its grateful coolness induce the child to swallow. This was done, and it was noticed that when the cold water reached the mouth through the teeth she swallowed it. This operation was frequently repeated and always with the same result. A half-cupful of milk with the addition of a teaspoonful of whisky was now prepared and administered in the same way, though it took half an hour to dispose of that quantity. This course seemed to inaugurate a distinct change for the better. Several cups of milk containing whisky were swallowed during the next twenty-four hours, and the child began to open its jaws and willingly to receive nourishment. Gradually various other forms of nourishment were taken, such as Brand's essence of beef, and, as might have been expected, improvement in the general condition soon followed.

While the disease was at its worst, about the end of the third week, there appeared a purulent discharge from both ears. I had previous to this occasionally examined the interior of the ears, one of these examinations having been made two days before the discharge appeared, without anything abnormal being found in the appearance of the tympanic membranes. The condition of the child at this stage, however, forbade the satisfactory examination of the ears. Two days after the first appearance of the discharge, inspection of the interior of the ears showed that both drum membranes were in great part destroyed, and that granular excrescences had already begun to sprout up. The walls also of the deep parts of the external auditory canals seemed to have a diphtheritic coating.

Efficient treatment of the ears was rendered difficult on account of the prostrate state of the child, but at least once a day, sometimes oftener, both ears were gently syringed with a warm solution of boracic acid, then carefully dried with absorbent cotton, and a small quantity of the acid, finely powdered, insufflated into the interior. As the child began to improve in its general condition this method of treatment was repeated every eight hours. The discharge nevertheless continued very profuse.

Though the general improvement was maintained, at the end of the fourth week another complication arose. The skin of the right cheek became intensely inflamed and over the lacrymal sac the tissues became much indurated. This was attended by a fresh elevation of temperature and increased restlessness. In the course of a few days an abscess formed, evidently in connexion with the lacrymal sac. This was opened and a quantity of pus evacuated, after which the inflammatory swelling gradually subsided without any operative interference. The parts did not, however, return to their natural condition for fully six weeks afterwards.

About the middle of the fifth week, as the swelling of the right cheek, due to the lacrymal abscess, was subsiding, it was noticed that that side of the face was less mobile than the opposite side, and also that the right eyelids did not perfectly close. At first it was hoped that the inflammatory swelling of the cheek explained these peculiarities, but soon it became evident that there was really paralysis of the right side of the face. In the course of a few days the paralysis was very pronounced. It was clear that the facial nerve was in some way involved in the mischief which had so rapidly and destructively attacked the middle ear, and it was feared that we had now to deal with some affection of the bone involving the walls of the Fallopian canal. The testing of the electrical reaction was purposely omitted in case of again exciting the resistance of the child, and par-

ticularly as no practical question of treatment by electricity required to be raised till after the lapse of a few weeks. Profuse purulent discharge still continued to come from both ears, in spite of the most careful application of the boracic acid treatment. Although every six hours the ears were syringed with a solution of boracic acid, then dried, and the powder insufflated, exuberant granulation tissue sprouted up from the walls of the external auditory canal and from the tympanic cavity.

Now that the child's general condition rendered it possible to ascertain the state of the hearing power, it was found that very great deafness existed, and that very loud speaking near to the head was essential in order that she might understand what was said. Her general condition continued to improve; nourishment was freely taken, and the strength gradually increased. At this stage she was conveyed back to town in order that the ears might receive the best attention, with the hope that their successful treatment might favour the disappearance of the facial paralysis. The boracic acid treatment, which is so frequently successful in purulent disease of the middle ear, having received a fair trial without apparent effect, I now employed, in addition, a solution of nitrate of silver (forty grains to the ounce of water) every day, using it in the manner first suggested by Schwartze—namely, dropping the solution into the ear, and then, after two or three minutes, neutralising it with a weak solution of common salt injected into the ear. After a week's trial, no good effect being apparent, the treatment by nitrate of silver was abandoned. Noticing that Burckhardt-Merian strongly recommended an alcoholic solution of salicylic acid for purulent ear disease associated with diphtheria, I next tried this remedy, but found the pain and irritation to be so great that it had to be given up.

Diluted rectified spirit was next employed in the strength of one-third of spirit and two-thirds of water. The following process was carried out every eight hours: (1) Careful syringing with a warm solution of boracic acid; (2) removal of all the moisture in the interior of the ear with absorbent cotton on a cotton holder; (3) instilling into the ear fifteen drops (warm) of the diluted spirit; (4) allowing it to remain in the ear, while the child lay on the opposite side, for fifteen minutes; (5) drying the canal with cotton, and then placing a plug of salicylicated cotton in the orifice of the ear. This treatment was, of course, applied to both ears. In addition, and in order to ensure still more thoroughly the complete expulsion of the purulent secretion, Politzer's method of inflating the middle ear was performed once a day after the syringing. The nasal passages were also syringed daily with a tepid solution of chlorate of potash. The strength of the spirit was gradually increased to equal parts of water and rectified spirit, but when employed stronger than this the pain excited by it compelled us to return to the weaker form. This method of treatment very soon proved itself to be the most efficient. The discharge perceptibly diminished; the granulation tissue began to shrink and the hearing power became more acute. For five weeks after its first appearance the facial paralysis remained unaffected. Then the child showed more power of closing the eyelids, but probably another fortnight elapsed before the muscles of the cheek showed signs of mobility. First the naso-labial furrow deepened, and almost day by day some progress was observed in the recovery of the muscular power of the face. In about nine weeks from the time the paralysis was first observed it had completely passed off. There is no doubt that the returning power to the muscles of the face was co-incident with the improvement in the ear due to the spirit treatment. This improvement went steadily on, and in the course of four weeks from the beginning of the spirit treatment the granulation tissue had disappeared and the discharge reduced to a trace. When this was achieved very little of the tympanic membrane on either side was found to exist. The hearing was notwithstanding surprisingly good. In four months from the first attack of the fever the girl seemed almost as healthy as she had been before, though still somewhat dull of hearing. Her return to the country had no doubt contributed to this satisfactory result.

On May 15th, 1885, about eighteen months after the attack of scarlet fever, the condition of the hearing was as follows: Right ear—hearing distance for watch, $\frac{4}{6}$; for Politzer's Hörmesser, 8 ft. Left ear—hearing distance for watch, $\frac{3}{6}$; for Politzer's Hörmesser, 9 ft. The whispered voice was heard in a quiet room at a distance of about 12 ft. with the eyes closed. The bone conduction of sound was on both sides better than the aerial. In each ear the only part of the tympanic membrane remaining was a piece of thickened membrana flaccida attached to the short process of the malleus. The handle of the malleus was not visible, but having lost the support of the tympanic membrane, it was probably drawn up by the tensor tympani muscle into the upper tympanic cavity. The inner wall of the tympanum was, owing to the loss of the tympanic membrane, clearly visible, and was seen to be lined by slightly thickened mucous membrane. The secreting process in the middle ear had long ago ceased. The throat still presented marks of the severity of the original disease. The base of the uvula was deeply indented, and the posterior edge of the soft palate somewhat serrated. The mucous lining of the posterior wall of the pharynx was also irregularly thickened. With the exception of some tendency to nasal catarrh, the child seemed to be in a condition of robust health.

Remarks.—1. This case bears out what Burckhardt-Merian has especially drawn attention to[1]—namely, that scarlet fever, when complicated with or followed by diphtheria, is apt to give rise to a most destructive type of disease of the ear. It is probable that in such cases there is a real propagation of the diphtheritic membrane along the Eustachian tube to the tympanic cavity, and even to the external auditory canal. We have not simply to deal with an ordinary collection of purulent secretion in the tympanic cavity, with rupture of the membrane and evacuation of the pus; we have rather to do with a rapidly destructive ulcerative process which, as is shown by this case, denudes the organ of the tympanic membrane in a very short time. There is reason to believe that scarlet fever alone does not produce such havoc; the addition of the diphtheritic poison seems to impart that destructive tendency to the ear complication which may terminate in deaf-mutism, or even lead to a fatal issue.

2. From the favourable course of the facial paralysis in this case, we need not despair of recovery from this complication of purulent disease of the ear. In children, not only is the facial nerve, as it lies in its osseous canal on the inner wall of the tympanum, in close juxtaposition to the mucous membrane of the tympanic cavity, but the bony walls of this canal are very frequently defective when the neurilemma of the nerve is in actual contact with the mucous membrane. It is easy to understand how, with such an anatomical arrangement, the pressure of granulation tissue, swollen mucous membrane, or even of secretion, may produce paralysis of the facial nerve without ulcerative disease of the bone, and therefore without the same gloomy prognosis.

3. The recovery of fair hearing also illustrates a fact which is not unfrequently observed—namely, that fair hearing may exist even when the tympanic membrane is almost quite destroyed. What is of more importance than the presence of the tympanic membrane is a normal mobility of the fenestral structures. If these structures, with the stapes, are not thickened, bound down by adhesions, or subjected to pressure, fair hearing power may be enjoyed, although the membrane, with even the malleus and incus, should have been swept away.

4. This case also shows in a striking way the value of treatment by rectified spirit in purulent disease of the middle ear associated with granular excrescences.

ON THE COMBINED ACTION OF COCAINE AND ATROPINE IN IRITIS.

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IN a paper on the Cocanised Eye, before the Opthalmological Society on Jan. 8th, 1885, I mentioned the use of the combination of cocaine and atropine in producing a very large dilatation of the pupil, and showed how this could be utilised in cases of iritis. Since then I have been trying how best to use such a combination, but the expense of the drug till lately has restricted me in the number of my cases. I first tried using cocaine at the hospital after the patient

[1] See "Ueber den Scharlach in seinen Beziehungen zum Gehörorgan," von Alb. Burckhardt-Merian, in Volkmann's Sammlung, No. 182.

had been using atropine in the intervals of his visits, and hoping, perhaps, that the increased mydriasis produced might be kept up by the atropine used at home. A solution of atropine and cocaine was next tried when the patient could afford to pay for it, but finding how badly such a solution keeps, even with care, I gave it up for some discs which Messrs. Savory and Moore made for me. These discs contain $\frac{1}{120}$ grain of cocaine hydrochlorate and $\frac{1}{1000}$ grain of atropine in each, and have answered all my requirements, being easy of application, constant in action, and very reliable. The following case in a healthy eye shows how quickly this combination produces an *ad maximum* dilatation of the pupil.

E. G——, aged six, pupils 5 mm., equal, act well to light and accommodation; 2·24 P.M., disc of cocaine and atropine in left eye; 2·29 P.M., no effect on pupil, slight drooping of lower lid; 2·34 P.M., pupil 9 mm. when shaded, 6 mm. in bright light; 2·40 P.M., pupil 10 mm., acting very slightly to light and accommodation; 2·42 P.M., pupil 11 mm., does not act to light or accommodation. Therefore we have in eighteen minutes in this patient an *ad maximum* dilatation of the pupil. To test the difference in time, and rapidity of dilatation of the pupil for the same amount of atropine, the following notes were taken on the same patient:—2·46 P.M., right eye, pupil 5 mm., disc of atropine ($\frac{1}{120}$ gr.) put in eye; 2·58 P.M., no effect; 3·4 P.M., no effect; 3·17 P.M., pupil 8 mm., does not act to light or accommodation; 3·22 P.M., pupil 9 mm.; 3·46 P.M., pupil 9·5 mm., and did not increase. Thus in eighteen minutes atropine had no effect, and in one hour the pupil was only 9·5 mm.

The following cases of iritis were treated at the Central London Ophthalmic Hospital:—

CASE 1.—B. B——, aged twenty-seven, was admitted Dec. 30th, 1884. Syphilitic iritis; rash eight weeks ago; left eye inflamed six days. Left eye: great ciliary congestion; iris discoloured; pupil 3·5 mm.; irregular; on lower pupillary margin of iris is a gummatous mass; T + 1. Ordered instillation of atropine, four grains to the ounce; cantharides plaster, 1 in. by 1 in.; compress; and solution of perchloride of mercury, one drachm three times a day.—Jan. 2nd, 1885: Still in pain. Left eye: ciliary congestion; gumma of iris the same; pupil 7 mm.; irregular; tension + 1. Two instillations of cocaine, 4 per cent. solution; pupil, 9 mm., and regular, except below where gummatous mass is; some uveal pigment on capsule of lens, where other synechiæ were; great relief of pain. This patient continued under the same treatment, the gumma becoming absorbed; and the pupil under cocaine and atropine 9 mm., regular, and no synechiæ to be seen even where the gumma was. He had one relapse of the iritis on Feb. 20th, but this cleared up with the same treatment, and on March 17th the note is:—Left eye: no congestion or pain; pupil 9 mm., a posterior synechia on the inner side, otherwise pupil quite regular; on lens capsule uveal pigment, especially below where the gumma lies.

CASE 2.—E. G——, aged forty-two, admitted Jan. 3rd, 1885. Rheumatic iritis; third attack. Has been under treatment with ointment of atropia, instillation of atropine four grains to the ounce, and leeches for three weeks, but is still in great pain. Left eye: circumcorneal zone, pupil 5 mm. dilated, posterior synechiæ on inner and under aspect; a little uveal pigment on inner side of pupil; T + ½. After three instillations of 2 per cent. solution of cocaine the circumcorneal zone of the left eye was much lessened; pupil 8·5 mm.; numerous other small synechiæ were seen all round, and also much uveal pigment on capsule of lens. Patient spontaneously said that the eye felt much easier, and had quite lost pain.—Jan. 7th: Left eye, no circumcorneal zone, pupil 8 mm., regular, though he has only been using atropine drops as before since last visit. He says that, though he has had severe rheumatic pains in joints, the eye has not been painful. On using 2 per cent. solution of cocaine left pupil was 8·5 mm., and showed one small posterior synechia upwards and inwards.

CASE 3.—J. H——, aged thirty-two, was admitted March 3rd; syphilitic iritis; has been using atropine for one week. Left eye painful and congested; pupil 5·5 mm., dilated; numerous synechiæ. Two instillations of cocaine, 2 per cent., and pupil 6·5 mm. and regular.—6th: Has been using atropine since last visit. Left eye: no pain, very little congestion; pupil 8 mm., regular. Under cocaine, pupil 8·5 mm.; no synechiæ to be seen.

CASE 4.—C. S——, aged fifty-five, was admitted March 31st. Left eye inflamed for three weeks. Great ciliary congestion in left eye; iris discoloured; pupil 3·5 mm., sluggish; Tension normal. Ordered atropine drops (four grains to an ounce), and compress.—April 7th: Still pain. Left eye: circumcorneal zone; pupil 4·5 mm, irregular; numerous posterior synechiæ. Two instillations of cocaine, 2 per cent. solution, and left pupil 7·5 mm.; only two synechiæ to be seen; pain quite relieved.

CASE 5.—T. S——, aged thirty-six, admitted April 24th. Right eye inflamed and painful for fourteen days. Right eye: ciliary congestion; iris discoloured; pupil 4·5 mm., sluggish, oval. Three instillations of solution of cocaine (2 per cent.) and atropine (four grains to the ounce). Right pupil, 7·5 mm., showing two posterior synechiæ; ciliary congestion much lessened; great relief to pain. Ordered atropine drops.—28th: No pain. Right pupil, 7·5 mm., regular. Two instillations of cocaine (2 per cent.), and right pupil 9 mm., regular; no synechiæ to be seen.

CASE 6.—J. M——, aged twenty-nine, admitted May 5th. Syphilitic iritis; three years ago primary sore; fifteen days right eye inflamed. Has been using atropine for one week. Right eye painful; well-marked circumcorneal zone; pupil 6·5 mm., dilated, regular; tension normal. Disc of atropine and cocaine put in; fifteen minutes after much less pain and congestion; pupil 7 mm., oval. A second disc was put in, and after ten minutes there was no pain in the right eye; pupil 8·5 mm., round and regular. Ordered atropine drops.—12th: Right eye still congested and painful; pupil 6·5 mm. Disc of atropine and cocaine put in, and pupil 8·5 mm.; showing a posterior synechia to the inner side. Ordered discs of atropine and cocaine.—19th: Has been using the discs regularly since ordered, and has had no pain in the eye. Right eye: very little congestion; pupil 8·5 mm., regular; no posterior synechiæ to be seen; tension normal.

CASE 7.—T. W——, aged thirteen, admitted May 15th. Right eye inflamed for nine days. Right eye: much congestion; central corneal ulcer; great photophobia; pupil 2½ mm. Ordered yellow ointment, with four grains of atropia, three times a day.—22nd: Right eye, still great congestion; corneal ulcer the same; pupil 5 mm., regular; anterior chamber deep. 3·45 P.M., disc of cocaine and atropine; 3·55 P.M., pupil 6 mm.; 4·5 P.M., pupil 9 mm., irregular, small posterior synechia above. Ordered ointment of atropia, four grains to the ounce, three times a day.—26th: Has had much less pain. Right eye: much less congestion; corneal ulcer smaller; pupil 8 mm., regular; disc of cocaine and atropine, and pupil 9·5 mm., regular.

CASE 8.—J. G——, aged twenty-six, was admitted on June 19th. Gonorrhœa six months ago. Right eye affected then; for the last six days both eyes congested, and left eye very painful. Right eye: old iritis; pupil very irregular; numerous posterior synechiæ. Left eye: marked ciliary congestion; pupil 3·5 mm., sluggish. Ordered atropine drops three times a day.—23rd: Has been using the drops regularly in the left eye, but still has pain. Left eye: circumcorneal zone; pupil 5 mm.; four posterior synechiæ to be seen. Ordered discs of atropine and cocaine.—26th: No pain; scarcely any ciliary congestion. Left pupil 9·5 mm.; one small posterior synechia above. To continue the discs.—30th: No pain; no ciliary congestion. Left pupil 9·5 mm., regular; no posterior synechiæ to be seen.

CASE 9.—F. R——, aged thirty-six, was admitted on June 26th, with syphilitic iritis. Six months ago he had primary sore; three months ago a rash, sore-throat, and his left eye inflamed for six days, and very painful. Left eye: great ciliary congestion; anterior chamber muddy; pupil 3·5 mm., irregular, and sluggish. T+½. Under atropine the pupil was very irregular, only dilating in the upper half, a broad posterior synechia binding down the lower half of the pupillary border of the iris. Ordered cocaine and atropine discs three times a day, and mercurial treatment.—30th: He has been using the discs four times a day, and after eight discs he says that the pupil became quite normal, and that he lost all pain in the eye. Left eye: very slight circumcorneal zone; pupil 10·5 mm., and regular; no adhesions visible; some uveal pigment just below the centre of the capsule of the lens; tension normal.—July 3rd: To continue discs; no pain; no circumcorneal zone; left pupil 10·5 mm., and regular.—21st: Four days ago he caught cold, and had a fresh attack of inflammation in the left eye, suffering great pain. He had finished all his discs, but obtained some yesterday, and after using four the pain was much relieved. Left eye: slight circumcorneal zone; pupil 10 mm.; slightly irregular from three small posterior synechiæ at the inner side; tension normal.—24th: Left eye: no pain; no ciliary conges-

tion; pupil 10·5 mm.; one small adhesion above and to the inner site.—28th: Left eye: no pain; no congestion; pupil 10·5 mm., and regular; no adhesions to be seen. To leave off discs.

CASE 10.—T. B——, aged forty, admitted July 3rd. Says that every three years he has inflammation of eyes; no history of rheumatism, gout, ague, or venereal disease. Right eye: circumcorneal zone; pupil 3·5 mm., very sluggish; ordered atropine drops.—7th: Right eye: still pain and circumcorneal zone; pupil 5 mm., irregular; posterior synechiæ; tension normal; ordered discs of atropine and cocaine.—14th: no pain. Right eye: very little ciliary congestion; pupil 9 mm.; one posterior synechia below.—21st: Right eye: no pain, no congestion; pupil 9·5 mm., regular; no synechiæ to be seen.

CASE 11.—J. C——, aged twenty-nine, was admitted July 24th. Rheumatic iritis; left eye inflamed for fourteen days. Left eye: Great ciliary congestion and pain; pupil 4·5 mm., sluggish; T+½; ordered atropine drops, but to get cocaine and atropine discs if possible.—28th: Used the atropine drops till two days ago, when the patient had great pain and could not sleep, so obtained the discs. He says that after one disc the pain was relieved in half an hour, and that he has been using them four times a day since. Left eye: no pain, very slight congestion, pupil 10 mm., regular; tension normal.—Aug. 4th: No pain. Left eye; pupil 10 mm., regular. To leave off drops. Saw him a month afterwards; eye perfectly quiet; no relapse.

Remarks.—On looking over the notes of the above cases of iritis, treated by the combination of cocaine and atropine, we find the following constant and quickly attained results: great dilatation of the pupil, relief of pain, diminution of ciliary congestion, and decrease of intra-ocular tension when present. Now, in the active stages of iritis, as in inflammation of any other part, we have congestion of the vessels of the iris, and this gives rise to sluggishness, or even to contraction, of the pupil, followed often by posterior synechiæ. Therefore any treatment, to be successful, ought to be directed to relieving the iris of blood, and dilating the pupil as quickly as possible, so as to remove the pupillary edge of the iris from the central portion of the capsule of the lens. The pain, which is such a prominent symptom of iritis, is, I believe, due either to the turgid state of the vessels, giving rise to tension of the iris, and so to pressure on its nerves, or to the tension of synechiæ. Considering the physiological action of the drugs employed, we find that atropine produces mydriasis by paralysing the endings of the oculo-motor nerve and the unstriped muscular fibre of the iris, and, according to most observers, by stimulatng also the dilating mechanism of the pupil. The action of atropine on the bloodvessels of the iris is apparently of little importance, as any constricting influence would be quickly followed by dilatation. Cocaine, as I showed in a paper before the Royal Society on June 18th, 1885, acts by stimulating the endings of the mydriatic nerve of the eye, and also by constricting the small bloodvessels, thus producing a very large mydriasis, acting always to the movements of light and accommodation. Thus we see that neither drug produces alone all the effects necessary in the treatment of a case of iritis; but the combination of cocaine and atropine gives us all these—viz., an *ad maximum* dilatation of the pupil, constriction of the vessels of the iris, and inaction of the pupil to light and accommodation. The *ad maximum* dilatation of the pupil produced by this combination keeps the pupillary border of the iris away from the capsule of the lens, preventing adhesions, and also breaks down synechiæ when formed by stretching them, and by constricting their vascular supply literally starves them. From these facts doubtless ensued the excellent results of cocaine and atropine in the cases above enumerated; but I would not, of course, suggest that this combination will have much effect in cases of old complete posterior synechiæ, but rather that we have in it a therapeutical remedy much more potent and certain in action in iritis than atropine. The rapid cessation of pain, which I have always seen follow the application of cocaine and atropine in iritis, enabled me to dispense with blisters and leeches in these cases.

WITH a view to prevent suicide from the top of Highgate Archway, the parish authorities of Hornsey and Islington have commenced to remove the parapet and to erect in its place strong iron railings 12 ft. high.

CASES ILLUSTRATING THE

SYMPTOMS AND TREATMENT OF CHRONIC ALCOHOLISM AS IT AFFECTS THE NERVOUS SYSTEM.

BY W. B. HADDEN, M.D. LOND., M.R.C.P.,

DEMONSTRATOR OF MORBID ANATOMY AND MEDICAL REGISTRAR TO ST. THOMAS'S HOSPITAL, PHYSICIAN TO THE ROYAL HOSPITAL FOR CHILDREN AND WOMEN.

(*Concluded from p. 611.*)

THREE other cases closely resembling the one just described have come under my notice: two proved fatal, and in both cirrhosis of the liver existed. In one there was also acute tuberculosis. I find cirrhosis of the liver and tubercle associated in several of the recorded fatal cases of alcoholic paralysis. The main point of interest in the present case was the fever, which I was inclined to ascribe to the presence of tubercle. The satisfactory termination of the case practically disposed of this assumption which, nevertheless, was not altogether without warrant. Occasional pyrexia in these cases is not unfrequent; but I had never before seen a continued fever such as existed in this patient. During her convalescence another woman was admitted into the same ward, with almost exactly the same symptoms; but with her the fever is only occasional. She seems to be tending towards recovery.

M. G——, aged twenty-two, an actress, was admitted into St. Thomas's Home on August 30th, 1884. For the use of the case I am indebted to Dr. Edmunds, with whom I saw the patient several times. There is good reason to believe she had indulged in alcohol to excess. There was no history of syphilis. About nine months ago she used to sleep badly and dream a great deal. In the daytime she was nervous, and afraid to go out by herself. About this time she began to have fits. She used to scream, fall down, lose her senses, and then sleep. She has bitten her tongue and lips in the fits. Altogether she has had twelve or fourteen such attacks, at intervals varying from two to six weeks. For a month before admission she had violent vomiting, and, according to her mother, had not slept during this period. Two days before admission she became strange in her manner, had screaming fits, and did not know her friends.

On admission she could not answer when spoken to, and indeed could scarcely articulate. She did not know her friends or take notice of things. Her mind seemed quite a blank. She did not sleep at all the first night, but on the second she slept two hours and a half after two doses of chloral. At this time there were constant choreiform movements of the arms, but not of the face or legs. The latter were very thin and drawn up. The patellar tendon reflexes were absent. She passed her evacuations unconsciously. She spoke occasionally, but did not articulate distinctly. A vesicular eruption, coming out in crops, was observed on the palms and soles. The urine was free from albumen. There was no sign of visceral disease. On September 3rd the eyes were examined, but there was no optic neuritis. Her mental condition had improved. She pronounced her name plainly. She slept well without chloral, but her bowels acted under her during the night. On September 9th the rigidity of the legs was found to be much increased, and there was more wasting. Sensation was much impaired. When lifted out of bed she was quite unable to stand, the legs remaining bent. The arms were still affected by the choreiform movements. A bedsore had formed on the back. She was ordered five grains of iodide of potassium thrice daily. A few days later an electrical examination was made. There was no response of the muscles of both legs with the interrupted current. With the continuous current there was no movement at all of the left leg. On the right side there was only a response with a very strong current, and the contraction was better when changed from a descending to an ascending than *vice versâ*. Rather more than a fortnight after admission her mind had become clearer, and she began to gain flesh. The legs were still drawn up and much adducted, the knees overlapping. She had regained sensation. There was almost complete paralysis. The jerky movements of the arms still persisted. She had now fair control over

the sphincters. On Oct. 17th Dr. Edmunds, who had been away for three weeks, noticed a marked improvement in her mental condition. She now began to mend steadily. The rigidity at the knees and the adductor spasm slowly disappeared, movements returned, the muscles became plumper and responded better to electricity, the patellar tendon reflex could be obtained, and her mental state became quite natural. At the present time (July), eleven months after admission, she is walking about with a stick fairly well. She still has some deficiency of movement, mainly of flexion and extension of the foot. There is every hope that she will regain the complete use of her limbs. As regards treatment, galvanism and passive movement were most serviceable. For a time an attempt was made to straighten the limbs by an extension apparatus, but without success. For the first three or four months after admission she was allowed six ounces of wine daily, but it was then deemed prudent to withdraw it. The nature of the fits, which occurred before admission, is doubtful; possibly they were epileptic, but on this point one cannot speak with certainty. At one time there was a suspicion that the symptoms were hysterical. The choreiform movements of the arms and her mental state lent some colour to this idea. But the atrophy of the limbs, their position in flexion, the electrical reactions, and the formation of a bedsore pointed to organic change dependent, as we believe, on alcoholic excess.

C. N——, aged forty-eight, a railway porter, was admitted into St. Thomas's Hospital, under the care of Dr. Stone, on December 8th, 1883. He had had no illness since childhood, and had never suffered from syphilis. He had been "on the drink" for several days before admission. During this debauch he had a sudden chill followed in a few hours by stiffness and weakness of all the limbs.

On admission, four days after the onset of the attack, he was very excitable and talkative, but answered quite rationally. He was perspiring profusely. He could flex the knees slightly, but otherwise the lower limbs were quite paralysed. The muscles were flabby, but did not seem wasted. The patellar tendon reflex was absent. There was wasting and paralysis of both arms; the supinator longus, the deltoid and the small muscles of the thumb on each side were most affected; the tendon reflexes were not obtained. Sensation was not impaired in the arms, but it was blunted in the lower limbs and about the umbilicus. The epigastric and abdominal reflexes were good. He had perfect control over his evacuations. There was some bowing of the back in the dorsal region, but no curvature. The internal organs seemed healthy, and the temperature was normal. On Dec. 13th it was noted that the paralysis of the extremities was complete, the tendon reflexes were still absent, the muscles were painful and contracted to direct stimulation, and sensation was good. On the same day he was found to have complete paralysis of the right facial nerve.—14th: He thinks strange things are in the bed. Is drowsy, but very talkative when spoken to. He still continues to sweat profusely. The paralysis of the right side of the face remains the same. Is very deaf on the left side, but hears a watch at eighteen inches with the right ear. The conjunctivæ are injected, and there is some muco-purulent discharge. The pupils are small but sensitive, the optic discs normal, but both external recti are weak. He was ordered a quarter of a grain of extract of belladonna night and morning, and a lotion of sulphate of zinc (two grains to the ounce) to be applied to the eyes.—18th: Sweating less. Has slight loss of control over the rectum. The arms are not so weak, but the legs still remain powerless. There is a blotchy eruption on the arms. The facial paralysis is less. All the affected muscles show the reaction of degeneration, though to a minor degree.—30th: The sweating has entirely gone. He can now move his arms fairly, and has slight power over the legs. The knee-jerks are absent; the muscles are somewhat tender, but less irritable; the facial paralysis is less. The deafness with the left ear remains complete, and there is now some deafness also on the right side. The conjunctivitis has disappeared. He is still very talkative, and wanders at night. The skin has broken over the sacrum, and there are black sloughs over both heels. He was placed on a water-bed. The following mixture was prescribed; biniodide of mercury, one-sixteenth of a grain; iodide of potassium, ten grains; water to one ounce; to be taken every six hours. The continuous current was ordered, ten cells being used for the arms and fourteen for the legs. He now began to make decided progress. The muscles responded to currents of less strength; the arms and legs became plumper; and on Feb. 28th it was noted that he was able to walk about the ward with the help of a stick. On the evening of March 4th the temperature suddenly rose to 103°. Next morning he was perspiring profusely, and there was swelling, redness, and tenderness of the finger- and toe-joints, and of the knees and ankles. He was ordered the following mixture: carbonate of lithia, ten grains; tincture of colchicum, fifteen minims; peppermint-water to one ounce; to be taken three times a day. On March 7th there was some œdema about the affected joints of the right foot, and they were much less tender. The left wrist and elbow were now inflamed. The sweating still continued. There was no heart affection. The urine passed on the 9th was analysed, and found to be very deficient in uric acid. The attack soon subsided, and his temperature was normal on the 12th. From this time he made uninterrupted progress. Before he left the hospital on May 28th all his symptoms had passed away, and the patellar tendon reflex was found to be present and equal on both sides. I saw the man a few days ago, fourteen months after leaving the hospital. He remains quite well.

This case bore a striking resemblance to an attack of acute anterior poliomyelitis. The onset was sudden, the muscular wasting rapid, the bladder and rectum unaffected (except once, when there was slight difficulty in controlling the motions), and the bedsores were of acute formation. The electrical reactions also favoured such a diagnosis. On the other hand, the occurrence of the attack after a debauch, the mental disorder, the blunted sensation, the profuse sweats, the deafness, the facial paralysis, and the joint affection suggested a different explanation to my mind.

The mental condition in this man was such as I had observed before in alcoholic paralysis. It is characterised by excitement and talkativeness, although delusions may be present, as in this patient. The profuse sweatings were due, I think, to vaso-motor disturbance. At any rate, there was no other explanation forthcoming. The weather at the time was cold and windy, so external causes were excluded. It is possible that the joint affection also depended on nerve lesion. The patient had never had a similar attack before, and its gouty nature was by no means clear. Its occurrence in a case like the present was certainly suggestive. It might be urged with some reason that the facial paralysis was accidental, and due to the usual exciting cause—a draught. This may be so. At the same time it must be remembered that the deafness, which occurred simultaneously, was on the left side, the facial paralysis being on the right. Such a combination—a neuritis of the facial on one side and of the auditory on the other—is more likely to depend on a constitutional than on a local cause. The cranial nerves do not escape in alcoholic paralysis, although Charcot and Feré assert that the facial is never involved. In one case of alcoholic paralysis I observed hemiatrophy of the tongue, which was found after death to depend on atrophy of the corresponding hypoglossal nerve. There seems no good reason, therefore, for excluding the facial and auditory nerves from the pathology of alcoholic paralysis. The lesion in this case was probably a multiple neuritis. That alcohol does give rise to such a condition is now placed beyond all doubt. Lancereaux, Dreschfeld, Reginald Thompson, and others have shown that this is so. In a paper about to appear in the Pathological Society's Transactions I have given the pathology of two fatal cases. In both the central nervous system was healthy. In one case only were the nerves examined, and in that distinct degenerative changes were discovered.

In conclusion, it is worth while drawing attention to the effects of treatment in alcoholic paralysis. In the first place, the total withdrawal of alcohol should be enforced; and not only so, but future abstinence enjoined: no medium course is allowable in such cases. As regards drugs I have little to say. In one of the above-described cases nux vomica had a decidedly beneficial effect on the obstinate constipation, but its action over the paralysed extremities could not be determined. Iodide of potassium in my experience is useless. Bromide of potassium and hydrate of chloral are serviceable in allaying the mental excitement which is so often present. In the treatment of the paralysis the only trustworthy therapeutic agent is the constant current. Its use may be required for months. Nothing appears more hopeless than some of these cases of alcoholic paralysis, and nothing really is more hopeful, provided only that the treatment by the constant current is persevered in. When organic changes in the viscera are present, such as cirrhosis of the

liver, the outlook will be less promising, and a fatal result may be unavoidable. Nevertheless, treatment even in such cases as these is not altogether without avail.

Welbeck-street, W.

CASES ILLUSTRATING THE

VALUE OF COCAINE FOR ALLAYING PAIN IN THE DESTRUCTION OF CANCEROUS GROWTHS BY CAUSTICS.

BY CHAS. E. JENNINGS, F.R.C.S. ENG.,
ASSISTANT-SURGEON TO THE CANCER AND THE NORTH-WEST LONDON HOSPITALS.

CASE 1.—Mrs. T——, aged seventy-three, consulted me in June last as to the advisability of excising her right breast, which was the seat of scirrhous cancer. The growth was partially adherent to the chest wall, and the axillary lymphatics and surrounding parts being also extensively involved, the case did not appear one in which much benefit would accrue from an operative procedure. The nipple and adjacent integument were replaced by an ulcer nearly three inches in diameter, the discharge from which was hæmorrhagic, semi-purulent, and very offensive. Applications were directed to be employed with the view of cleansing the ulcer and diminishing the bleeding and pain. On Sept. 3rd the surface of the ulcer was covered with rugged granulations, irregularly disposed, which bled upon pressure; the veins around the growth were much engorged, and the pain was increasing. After painting the ulcerated surface with a 10 per cent. solution of hydrochlorate of cocaine, and allowing a short interval to elapse, I applied a paste consisting of cocaine, potassa fusa, and vaseline. Destruction of the cancerous deposit by the paste was associated with warmth and tingling, when, after some minutes, a burning sensation was experienced. The paste was quickly removed with the charred tissue by pledgets of cotton-wool, previously moistened with water. The denuded surface was now painted with solution of cocaine, and the compound paste reapplied. Thus at one sitting about a tablespoonful of cancerous growth was removed by a rapid and almost painless process. The following morning a clean, smooth, and bloodless scirrhous surface, insensitive to the touch, was presented. The pain in the surrounding parts had disappeared, there was no engorgement of the superficial veins, and the patient expressed herself as very much relieved by the treatment. The plan was therefore repeated, and more of the scirrhus removed, with a result similar to that obtained by the first application.

CASE 2.—On Sept. 1st, E. R——, aged thirty-five, was admitted under my care at the Cancer Hospital. Since her confinement, six months ago, there had been a vaginal discharge, now of very offensive odour. Physical examination showed that the cervix uteri was infiltrated, and the os externum and adjacent portion of the cervix presented nodular excrescences, which readily broke down and bled when touched with a sound. The uterus was freely mobile, but subinvoluted. The patient's sister, too, was reputed to have died of "cancer of the bladder" eleven years ago. Destruction of the cervix with potassa fusa was decided upon as the most appropriate treatment for the particular case; and since the patient also suffered from a bronchitic affection, it appeared desirable to avoid the administration of a general anæsthetic, provided the necessary operation could be carried out painlessly or without severe pain. On Sept. 5th, the woman having been placed in a suitable position and a vaginal speculum introduced, with the assistance of Mr. Briscoe, house-surgeon, I destroyed the entire cancerous growth and the bulk of the surrounding cervical tissue by means of sticks of potassa fusa—a 10 per cent. solution of cocaine having been previously applied very thoroughly. The operation was not painless, but the patient never flinched; and upon the advent of pain the cauterising process was arrested by a douche of vinegar (which neutralised the potassa fusa) to admit of the reapplication of the cocaine solution.

Remarks.—Contrasting these two cases, it appears that the paste employed in the first was rather slower in its action than the sticks of potassa fusa used in the second; but the paste was equally efficient and far less painful, the explanation being that in the former instance absorption of the cocaine was simultaneous with the action of the caustic, whilst in the latter the sticks of potassa fusa soon operated upon the tissue beyond that over which the cocaine solution had exerted its anæsthetic influence. However, the application of cocaine to a cancerous cervix, as a preliminary to its destruction by caustic potash, notably diminishes the painful character of the procedure. And even less pain would follow the use of Playfair's probes impregnated with a cocainised paste, instead of the solid sticks of potassa fusa; or, what amounts to the same thing, sticks of potassa fusa could be easily prepared containing the necessary proportion of cocaine, and mitigated by the addition of some neutral substance.

Park-street, Grosvenor-square, W.

A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

ST. MARY'S HOSPITAL.

INJURY TO ABDOMEN; ACUTE PERITONITIS; ABDOMINAL SECTION; DEATH; REMARKS.

(Under the care of Mr. EDMUND OWEN.)

THIS case will be read with considerable interest; and although the treatment adopted failed to save the life of the patient, it fully confirmed the diagnosis, and might under more favourable circumstances have proved successful. Rupture of the small intestine proves fatal from shock, or within a few hours or days after the infliction of the injury from peritonitis, if the wound be sufficiently large to permit the escape of fæcal matter into the peritoneum. The surgeon naturally hesitates to perform abdominal section, the diagnosis in so many cases being obscure, and in the majority the part injured being the duodenum, a part comparatively inaccessible. But should he feel confident, from the symptoms and history, that rupture and escape of the contents of the bowel had occurred, operative interference would be more than justifiable, treatment of an expectant character being so unsatisfactory. The notes of the case have been furnished by Mr. Arthur Grieves.

On June 2nd last a carpenter, of middle age, was admitted on account of pain across the umbilical and hypogastric regions. It appeared that the night before admission the patient had had a heavy meal, and had been drinking beer freely. At about 10 P.M. he had gone out into the back yard to micturate. On his way out he slipped (he acknowledged that he was drunk at the time) and caught hold of a board to steady himself. He fell, and the board, a large heavy one, fell edgeways across his abdomen. He was unable to get up, and felt a sensation of impending death. He managed to make his wife hear; she helped him to bed and applied hot flannels to the abdomen. He suffered great agony all night, and was brought to St. Mary's Hospital in the morning.

On admission, the abdomen was tumid and tender, and did not move with respiration; it was tympanitic. Ice and milk were given in small quantities, and brandy and opium. At 3 o'clock Mr. Owen saw the patient, who was still much collapsed. The probability of some rupture having occurred within the abdomen was discussed, but in the critical and threatening condition of the patient active surgical interference did not seem advisable. Next day, however, though the man was in much the same condition, he and his wife were informed that in all probability something had given way in the abdomen, and that the slight hope of his recovery might be improved by opening the cavity and proceeding as circumstances might then suggest. With their full concurrence the abdomen was thereupon (at 4 P.M.) opened, by an incision through the linea alba for about three inches below the umbilicus. The coils of intestine were seen swollen and injected, and in some places were slightly glued together by curdy lymph. There was a large amount of dark fluid in the abdominal cavity, in which were found particles of undigested food. After a slight search a rent of about an inch long was found in the ileum about two feet

from its lower end. The wounded loop of intestine was then secured in a clamp, which served the purpose well; it was made of two pieces of gum-elastic bougie (No. 10), about three inches long, which were laid side by side and firmly tied together just above and below the wound in the piece of bowel, which was laid between them. The peritoneal cavity was then thoroughly flushed out with warm carbolised water, and the abdominal wound was closed, except where the clamped piece of intestine was left outside to form an artificial anus. The wound was dressed with iodoform and absorbent wool. The man rallied from the operation, but, gradually sinking, died six hours after it.

Remarks by Mr. OWEN.—When the patient was first seen he was evidently suffering from peritonitis and shock, the result of a blow or fall upon the front of the abdomen, the history at the time not showing clearly which. The collapse was extreme, the outlook hopeless, and the prospect of impending death considerable. The amount of stimulation was increased; and though the probability of the man having sustained rupture of some viscus, or of some large vessel of the abdominal cavity, was discussed, it was deemed prudent to await the further course of events. In the meanwhile, the man's wife was seen, and general consent to an introspection obtained; no doubt it would have been better if the operation could have been performed earlier. In certain cases of buffer accidents, and other serious injuries of the abdomen, it may be expedient to open the peritoneal cavity, not perhaps immediately after the receipt of the injury, but later on, in order that diagnosis may be assured, and a definite and special line of treatment adopted. Without abdominal section the man with a ruptured liver or bowel is almost certain to die; operation might improve his chance of recovery. The indications for interference might be persistence of the collapse, and invasion of acute peritonitis. In the above case a post-mortem examination could not be obtained—not, indeed, that there was great need for it.

YORK COUNTY HOSPITAL.

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from its lower end. The wounded loop of intestine was then secured in a clamp, which served the purpose well; it was made of two pieces of gum-elastic bougie (No. 10), about three inches long, which were laid side by side and firmly tied together just above and below the wound in the piece of bowel, which was laid between them. The peritoneal cavity was then thoroughly flushed out with warm carbolised water, and the abdominal wound was closed, except where the clamped piece of intestine was left outside to form an artificial anus. The wound was dressed with iodoform and absorbent wool. The man rallied from the operation, but, gradually sinking, died six hours after it.

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Mr. HYDE HILLS narrated a case of Inflammation of the Brain and Meninges following Otorrhœa. He was called on July 18th to see a fine young man, aged twenty-three, whose previous history was that he had scarlatina ten years ago and mumps four years ago. Since the first event he had occasionally suffered from otorrhœa of the left ear. Mr. Hills was told the patient had been suffering from earache and a slight discharge from the left ear for five days. He was then suffering a good deal of pain in the left ear, with pains running up the side of the head. There was a slight muco-purulent discharge from the ear. The pupils were equal and acted well. He was and had been perfectly clear-headed. The temperature was 100·5°; pulse about 84. He was ordered to foment the ear and to take one-sixth of a grain of morphia every four hours whilst the pain lasted. In the evening the pain had increased. Temperature 105°; pulse full and quick; pupils equal. The morphia was discontinued and two leeches applied behind the ear, and Dr. Humphry saw him in consultation at 9 P.M., when the leeches seemed to have had a marvellous effect. The patient was calm and clear-headed now. Temperature 101°. Some antimony and acetate of ammonia was ordered every four hours, and more leeches to be applied if the pain returned. The next morning (the 19th), at 9.30 A.M., his temperature was 97·5°; pulse about 80; pupils acting and equal. He had had a good night. In the evening his temperature was 101°. There had been some accession of pain during the day, which the application of a leech seemed to relieve. At 3 A.M. the next morning (20th) Mr. Hills was called up to him, as he had a good deal of pain and was wandering. He gave him thirty grains of bromide of potassium, which had a good effect. During this day he was aphasic and rambling at times; but this passed off by the next day (21st), and he was then in a stationary condition, being on the whole very clear-headed, talking sensibly. He complained of a dull pain on the left side of the head, and the temperature varied from 100° to 102°; pulse about 80; pupils acting and equal, except on one occasion, when the left pupil was certainly more dilated than the right, but this difference had disappeared on the next visit. On the 22nd he complained of the pain as being very great, and extending more to the right side, but his general condition was much the same. He was ordered a blister to the back of the left ear, and one-sixth of a grain of morphia every four hours if the pain was great. Next day the pain had much subsided; the top of the head was blistered, and savin ointment applied. The patient showed no material change for the next two days. On the morning of the 26th he was fairly comfortable, and was quite rational. However, at 3.30 P.M. on that day he complained of much pain, more especially in the body. His right pupil was then fully dilated; the left was normal. Temperature 105·2°; pulse quick and feeble. He was then in a semi-comatose condition, and died at 5 P.M. Necropsy, made twenty-two hours after death, showed extensive meningitis at the base of the brain, with purulent fluid and deposit of lymph, extending into the lateral ventricles; and inflammation and softening of the brain substance in the lower part of the left temporo-sphenoidal lobe, in which was an abscess cavity. There was no evidence of disease in the third left frontal convolution. On removing the dura mater from the left temporal bone a small aperture was found through which pus issued from a small cavity between the dura mater and the bone, at the bottom of which was a tiny loose sequestrum, the part of the brain above this being the seat of the abscess above described. The tympanum contained much turbid fluid. Mr. Hyde Hills remarked upon the great variation in the symptoms in this case, and the absence of alarming symptoms on the morning of the day on which the patient died; the aphasia was also difficult to account for.

Prof. HUMPHRY showed the outer half of an Astragalus which had been separated by a longitudinal fracture, traversing the middle of the bone, and which had been removed successfully. The patient was under the care of Mr. J. B. Cross of Scarborough, who had presented the specimen to the Pathological Museum at Cambridge, and the following account of the case had been furnished by his assistant, Dr. Walton:—H. W——, aged sixteen years, was cleaning

the drawing-room floor windows (about 16 ft. from the ground) on May 1st, 1883. Losing his balance, being outside, he fell into the road, clearing the railings and pavement by a spring and coming down in the gutter with his left foot under him. Seen half an hour afterwards, the left foot was much discoloured, bruised, and distorted in shape, owing to the projecting astragalus on the left side of the dorsum; there was also crepitation over the left internal malleolus, but the skin was whole. Chloroform was administered, and with great difficulty the bone was reduced and the leg put up in splints, and the patient removed to his lodgings. After going on well for a fortnight, the bone seemed to slip out again gradually, and pressed against the skin, causing a small slough to appear over the projecting articulation for the cuboid. On May 26th chloroform was again administered at his lodgings, and the opening in the skin, caused by the slough coming away, was enlarged in a curved manner, for about 2½ in., with the idea of removing the whole bone; but on manipulating it, the fractured surface was found, and the outer half of the astragalus being loosely attached, was removed by seizing with lion forceps, and dividing the strong interosseous ligament going to the os calcis, the other ligaments having been torn by the fall. No other fragments could be felt, and the broken surface remaining seemed healthy. The wound was partly closed by one stitch, and the cavity packed with lint steeped in carbolic oil, and the limb put in a MacIntyre's splint. With daily syringing out the cavity filled up, though the ankle remained swollen for a long time. By July 10th the wound was quite healed and the swelling of the ankle much reduced. He went home on crutches on July 17th, and was able to walk about with a stick. Prof. Humphry remarked that it was probable from the crepitus described as being felt over the internal malleolus that this process had been broken off, and the astragalus had been split by the fractured inner edge of the tibia being driven forcibly upon the middle of the trochlear surface. Instances have occurred in which the astragalus has been broken in various directions, and it is not improbable, as Mr. Bryant observes (Practice of Surgery, vol. ii., p. 464), that the accident is more frequent than is supposed, but is difficult to diagnose.

New Inventions.

NEW MIDWIFERY FORCEPS.

MY apology for bringing another pair of midwifery instruments before the profession is that, doubtless in common with many others, I have felt the want of something in size between the very long and the very short forceps (say Simpson's), the former being perfect when the head is at the brim, and the latter next to useless. For first cases, where the head is low down or on the perineum, where it has come to a standstill from inertia uteri or rigid perineum, when to save the child interference is necessary, I have designed the forceps shown in the woodcut. The blades are 6 in.

long, nicely curved, with a shank 1½ in. in length (practical men will at once see the importance of a shank of this length). The middle of the blades at the widest part (outside measurement) is 1½ in. in width; between the blades at the widest part is 3 in.; at the extremity ¾ in. The interior measurement between the shanks is ⅜ in. The handles are 5½ in. long, and are roughened; the edges of the blades are nicely rounded. These details have been admirably carried out by Messrs. Mayer and Meltzer, of Great Portland-street. The result is a very handy and portable instrument.

Gay-street, Bath. JOHN DAVIES, M.R.C.S.

SELF-LUBRICATING AND SELF-ADJUSTING PISTON FOR SYRINGES, ETC.

MESSRS. MAYER & MELTZER, of Great Portland-street, have submitted to our inspection a patent self-lubricating and self-adjusting piston for syringes, &c. The piston consists of two flanges, the side being made of a seamless band of leather, and the interior charged with vaseline. The syringe is lubricated by turning the knob or ring of the syringe, which is attached to a screw which passes through the piston-rod, and, acting upon the flanges of the piston, brings them into closer contact, thereby pressing the vaseline (with which the piston is charged) through the pores of the leather, lubricating the syringe, and at the same time causing the leather to distend and adjust itself to the cylinder of the syringe. The vaseline with which the piston is charged does not in any way, as is well known, affect

metal, as would be the case when oil is used, but preserves it and prevents it from corroding, so that there need be no fear of verdigris or other deleterious matter affecting the syringe. Further, the syringe may be laid by for any length of time, even for years, and may be taken up in good order and ready for immediate use; the vaseline not drying up preserves and keeps soft the leather of the piston, and keeps clean and in good condition the metal or other substance of which the syringe may be made. The advantages of this invention as applied to enemas, hypodermic injectors, aspirators, stomach-pumps, &c., will be readily appreciated, especially for use in hot climates, where leather or other material used for pistons (with the old means of lubrication) so soon perishes, leaving the instrument corroded with verdigris and perfectly useless.

Abstracts
OF
INTRODUCTORY LECTURES,
DELIVERED AT THE
OPENING OF THE PRESENT SESSION AT LONDON AND PROVINCIAL MEDICAL SCHOOLS.

KING'S COLLEGE.

THE opening address of the medical session was delivered by the BISHOP of LONDON. He desired, he said, to take that opportunity of setting forth some traits in the character of a religious physician—an outline, as it were, of that ideal which should ever be before the eyes of a medical student who desired to be really worthy of the noble profession to which he was devoting himself. The subject of their study was by far the most complex, the most finished of all the works of God. Life itself was the most mysterious thing in the world of nature. It seemed to have no analogue. In so far as matter was subjected to any kind of either mechanical or chemical action, these might involve almost any degree of change in outer form, but the substance appeared to remain the same. As a proof of this, whatever might be done in this way might be undone. What had been compounded might be resolved; what had been resolved might be recompounded. There was no progress whatever, although

there might be infinite variety of combination. There was no increase or possibility of increase of the forces at work. There seemed to be no increase or possibility of increase of the material to be worked on. Science assumed, and appeared to be justified in assuming, that the original quantity of matter, however it came into being and whatever forms it may have assumed, yet remains exactly what it was—that no particle of it is annihilated and no particle of it is added. Science seemed equally justified in assuming that the original quantity of force, however it came into being, passing through every variety of change, sometimes showing itself in heat, sometimes in light, sometimes in electricity, and sometimes in visible motion, nevertheless remained always the same. Thus motion might be converted into heat; but whatever heat was thus produced, a corresponding amount of motion must be destroyed. "From this restraint life is free. It exists, it can be communicated, it can be destroyed. But the communication of life by one living form to another by no means involves the destruction of life in that which first possessed it. And as life stands alone in its power of indefinite increase and diminution, so does it stand alone in the mystery of its origin. The theory of spontaneous generation has been upset in every instance whenever it seemed for a moment to be established. And while life is thus mysterious in its origin, how wonderful also is it in its development. Nothing else shows itself capable of such progressive ascent from lower forms to higher, from simple to complex, from plain to beautiful, from weak to powerful, from blind to intelligent. Nothing else has in it the same wonderful promise for the future to correspond with all that we know or can reasonably infer from its history in the past. The meanest living creature seems potentially far above the grandest mass of inanimate matter. And if life, considered in itself, be thus marvellous, how far more marvellous in its most perfect form when, in the human framework, it is the seat and organ of the faculties of sense, of intelligence, of reason and conscience, each in succession rising above the other until we pass beyond the physical to the spiritual nature, and find ourselves contemplating a being whose constitution makes him akin to the Creator of all things, capable of understanding the laws according to which all things have been made, of appreciating the order, the beauty, the sublimity of the universe, of forecasting the aim and purpose to which all things are tending." This, said the bishop, was the subject of the physician's and the surgeon's study. No other could rank higher. With what manly reverence, equally removed from shallow and vulgar coarseness and from silly superstition, would the religious student regard the human body which he studies, and which he daily finds more clearly proved to be the most perfect of all God's works on earth. In his studies he was perpetually on the confines of that mysterious interval, whatever it might be, which separates mind from matter, the spiritual from the physical. It was impossible for any lengthened investigation, especially in the examination of disease, not to find mind acting very seriously on matter in ways outside what was commonly understood by human action. And closely akin with this was the near connexion of the practice of medicine with the religious life and with the place assigned in that life to prayer. There was always room for the unseen and unknown and unsearchable. There was no check on the freedom of earnest prayer, however scientific may be the process which the healing art shall prescribe. The religious student would realise that he was dealing with what is not physical only, and this would give to all his researches a thoughtful, reverent, self-controlled character which would show itself even in his manner. The very purpose of the profession was to alleviate human suffering. Sympathy with suffering was the characteristic and the essence of the profession. "The physician and the surgeon ought to be—how very often they are—the tenderest, the most merciful, the most sympathising of men. It is, no doubt, often necessary in the practice of medicine to inflict pain in order to save life, or in order to prevent still greater pain which is seen to be approaching. It may, perhaps, be necessary, in the investigation of medical science, to inflict severe pain on the lower animals while searching into the nature of their bodily powers in order to compare them with our own. But in every case the true physician or surgeon, remembering the supreme purpose for which he lives, will insist on retaining his own tenderness of feeling; will inflict no severe pain that he can by any possibility avoid; will make what pain he inflicts as brief, if it may be so—as instantaneous as he can possibly make it; will never repeat pain for the mere purpose of the greater certainty of his conclusions; will refuse altogether to inflict pain even for the highest scientific ends if the degree of it be so excessive as to make him feel that nothing would ever induce him to submit to it himself, or make him think it just that a stronger being than he should inflict it on him. Nothing can justify him in ceasing to be a man in order to become a more effective scientific instrument of research; nor can the religious investigator surrender that sympathy with all suffering which is his highest title to the respect of himself and his fellows."

ST. THOMAS'S HOSPITAL.

MR. MACKELLAR, who delivered the introductory address, which was listened to with unusual attention, and which caused frequent applause, commenced by saying: "Gentlemen, it has fallen to my lot this year by the invitation of my colleagues, and it is alike my honour and privilege, to throw open to you the gates of this temple of medicine, and to bid you welcome on its threshold. And you must pardon me if to my words of welcome I add a few words of counsel, and if through those words of counsel there should be heard a note of warning." Mr. Mackellar advised his hearers before definitely entering the profession to consider whether they had seriously counted the cost of what they were undertaking. For he thought that no man ought to take up the profession unless he could, on examining himself in all simplicity and sincerity, say that he had a natural aptitude for it. He then generally reviewed the conditions which induced a man to enter the profession, and spoke at some length of the advantages and disadvantages of so doing. He continued: "I do not suppose that anyone is without the desire of fame—'that last infirmity of noble minds,' as the poet calls it. But you need not to be told that fame is a thing which none can command; that Fortune is a capricious goddess, who showers her gifts so undiscerningly as to justify the popular adages—'Fools are Fortune's favourites;' 'Fame comes unlooked for, if she comes at all.' It may possibly happen to some of you to awake some morning and find yourselves famous. But remember 'fame has two wings—one black, the other white;' and I presume none of you would wish to soar aloft upon the black pinion." After some general observations to first-year's students, referring to prizes, Mr. Mackellar said that they were to remember that prizes were only milestones marking certain stages towards the goal, and were not the goal itself. He considered the most valuable prizes were the resident appointments at the hospital and the opportunities afforded of acquiring practical knowledge. Great stress was laid on the advantage of a thorough grounding in natural science before commencing medical study. The importance of a knowledge of modern languages was next strongly dwelt upon; and, speaking of the International Medical Congress, he said that the Congress was a grand and noble exposition of the truth that Science soars above all ethnological and geological discussions, and that medical men, no matter what their nationality and creed were, united in common quest for that knowledge which was to be applied to the relief of suffering humanity. "Another motive which should spur you on to acquire facility in foreign languages, is the increased relish which such a facility gives to the delights of travelling. There is no mode of education alike so pleasant and so profitable as travelling in contact with foreigners; familiarity with their customs and modes of thought enlarges the mind and widens the experience in a way otherwise unattainable. The mere rapid transition of scenes and circumstances clears and sharpens the intellect. A man's thinking powers often stand him in better stead when he is standing face to face with Nature in its grandest aspects, than when he is merely bending over his books; and lights break in upon him with an unexpected flash that he has long been groping for in vain. Goethe, who is perhaps the finest example I can cite of the thoroughly furnished all-round man, is a striking instance of those sudden glimpses—one might almost say of inspiration—with which truth flashes on the eye of genius. A sheep's skull, picked up by chance upon the Lido, revealed to him that the skull is a series of altered vertebræ. The sight of a fan palm at Padua suggested the first idea of the metamorphosis of plants. These discoveries led him to the

opinion that differences in anatomy are variations of one common type, and to recognise the links that bind together the world of plants and animals. He thus struck the key-note of the modern doctrine of evolution, and was the forerunner of Darwin." In advocating the advantage of travel to a medical man, Mr. Mackellar related many interesting experiences which had come under his own observation of surgery amongst Arab, Turkish, and other nationalities. He said, "We may learn a lesson in osteo-plastic surgery from the Circassians, who practise in no mean degree the art of surgery. A Circassian may consent to part with an upper extremity, but never with a lower; he rather prefers death than a mutilation which will prevent him from mounting a horse. A Circassian not able to ride would consider himself degraded in the eyes of his people. In compound fractures of the leg all splinters are carefully removed by them; if difficult in reduction, all protruding fragments are sawn off. If a hiatus remain, a piece of bone of the size and form calculated to fill the gap is taken from a foal, or, failing this, from a young bullock. This is put in the interspace, and allowed to remain there; the limb is then put up in bandages, soaked in a paste made of ground Indian corn in water thickened with white of egg." He had seen many fractures so treated, and certainly their condition left nothing to be desired. Speaking of the future of the newly qualified man without a definite career in view, Mr. Mackellar strongly advised the Services as affording an opening for an honourable, useful, and even distinguished career. Quoting a distinguished military authority, he repeated the quotation that "the qualities that make a great commander of troops are absolutely essential to make a great operator or military surgeon"—briefly stated, coolness and calmness during circumstances of great peril to life and in the presence of surgical emergency, sound judgment, promptitude of action, fertility of resource, and great intellectual intrepidity. The great surgeons Liston and Sir Astley Cooper possessed these qualities in a high degree. He then continued: "Many of us heard with pain and regret of the alleged shortcomings of the Army Medical Department in the Egyptian campaign of 1882. You have all heard of the three R's, but perhaps you have not all heard of the three S's—I mean Secrecy, Speed, Success, the first two conducing to the third. In that campaign it was of vital importance in order to achieve a military success that the operations of that expedition should be conducted with absolute secrecy, with the utmost speed, and you will understand how such conditions must have impeded, hampered, and fettered the arrangements of the principal medical officer of the Army Medical Department. The very condition of secrecy would preclude his making the medical dispositions that he might wish to make—the condition of speed would seriously interfere with his provision for the transport of medical stores; and yet we all know that at the close of a most searching investigation, conducted by a special commission, not only were the Army Medical Department absolved from all blame, but were accorded the highest praise for the admirable arrangements they had been able to make under such adverse conditions. Should any of you enter Her Majesty's service, let me give you one piece of sound advice: try to sink the soldier and become the doctor; disregard entirely stars, stripes, spurs, trappings, or relative rank, but rather try to win the affection, respect, and regard of those committed to your care by the sound professional knowledge which they feel you possess. The day and hour seem to have arrived for a more intimate blending, for a closer welding together of the civil and military branches of our common profession; we are, and ought to be, interdependent." Mr. Mackellar also alluded to the importance of the practical study of hygiene, and further suggested that this and other hospitals should afford greater facilities to the general body of practitioners, military and naval officers, of keeping breast of the times in medical and surgical progress. He especially advocated some modification of the post-graduate system in vogue in the United States. In his concluding remarks, speaking of the responsibility of the medical profession towards the public, he said, "There is a proverb to the effect, that if pain were only heard instead of felt, the whole world would be ringing with the sound of it. This expressed the great truth that the world is full of suffering. We stand between this mass of suffering and humanity. In any time of public panic, when a pestilence threatens to invade our shores, the public turns to us to avert it, or to guide them in resisting it if it is actually among us." He regarded the mental discipline, the moral training, the vast experience of men and manners to be acquired in either of these services as the equivalent, and more than the equivalent, of a university career." The lecturer concluded by quoting the advice which Hippocrates was accustomed to give to his pupils:—"'Do not seek either pomp or riches; heal gratuitously, with the sole desire to secure esteem and gratitude. When you can, aid the poor man and the stranger; and if you love mankind, you will love your art. If you are consulted about an affection, do not use long words, neither impose a studied nor inflated discourse, for nothing more truly indicates incapacity than to imitate the empty buzzing of the hornet.' In those diseases which allow of a choice of remedies, the instructed man will choose the simplest and most convenient, as being the least liable to lead to error; and it would be well for us to remember and repeat the oath he administered to his pupils: 'With purity and holiness I will pass my life and practise my art.'"

UNIVERSITY COLLEGE, LONDON.

THE address at the Medical School of University College, London, was given by Professor E. A. SCHAEFER, F.R.S., whose remarks were chiefly directed to the subject of the reform of medical education. He contended for the necessity of regarding such education as being for the practice of a profession, not for the carrying on of a trade. The existence of persons who desire to pursue medicine as a trade is probably from the cry which is occasionally raised that the standard of medical education is too high, that the time occupied in acquiring knowledge is too long, that the cost of a medical education is too great, that a qualification should be easily obtained, and should rank as a degree of a university, that the guinea's stamp should be used for baser metal. If it is admitted that medicine should be practised as a profession and by gentlemen, those who intend to practise it should in the first instance have the ordinary education of gentlemen. At school there should be acquired the same acquaintance with classics and mathematics, the same knowledge of the English language and literature, of history and geography, and of one or more modern languages which are universally regarded as forming the essential elements of a gentleman's education. There is always time for a boy to obtain the necessary knowledge of natural science after leaving school, but the opportunity of acquiring Latin and Greek never occurs, and will, if lost, be many a time deplored. Mathematics, too, must on no account be neglected. It is invaluable for the training of the mind to that exactitude of observation and precision of statement which are absolutely necessary to all truly scientific investigation, and every case which comes under a doctor's care partakes of the nature of such an investigation. It forms also the basis of the physical sciences upon which scientific medicine and surgery find their foundation. After leaving school it should be obligatory upon every student to devote at least one entire year to the study of physics, chemistry, and biology at a college or university where they are thoroughly taught in proper laboratories and by recognised teachers. To take a lad straight from school, or, perhaps, after having first let him waste a year or two bumping about upon country roads in a doctor's gig under the idea that he is thereby gaining an insight into medical science and practice, and to send him to learn physiology without his having previously acquired even the most rudimentary notions of biology, chemistry, and physics, is to compel him to study that subject without understanding it, to strip it of all the interest which it otherwise possesses, and is fatal to the future comprehension of the physical and vital problems of medicine and surgery. Of the four years devoted to proper medical studies, the lecturer would have the first two, as at present, given up almost entirely to physiology and anatomy, but he would apportion the time which is given to these subjects very differently. The arrangement which at present obtains is based upon the assumption that anatomy is the foundation upon which the whole superstructure of medical and surgical science is reared, while physiology is of little consequence, requiring little effort to master, and not more than one-sixth of the time which is claimed for anatomy. This assumption could only be justified if the object of medical education were to provide physicians not for the living, but

for the dead. Some idea of the character and composition of drugs might also be acquired during this first period. Not that this knowledge should be a necessary part of the stock-in-trade of a medical man, but because it is unfortunately still necessary in many country places for the doctor to be his own druggist. The time of a professional man should be more valuable than to be spent in mixing medicines and preparing pills and powders, and it were much to be desired that he should be relieved of this incubus and his time set free for work of a nobler kind. At any rate, materia medica, as a part of a medical education, should be restricted as much as possible. Little as the student's mind ought to be burdened with the dry details of materia medica, it is all important that he should acquire a proper understanding of the action of drugs in health, so that they may be scientifically applied to combat the manifestations of disease. The lecturer next proceeded to urge the pressing necessity for the provision in London of commodious laboratories for the practical study of physiology, pathology, and pharmacology. Amazing as it may sound to a continental reader, there is not, he said, one proper pathological laboratory attached to a single medical school in London. The only pathological laboratory that he knew of is that belonging to the Brown Institution, and pharmacology cannot even boast so much as this. Even in the smallest German university there was a Professor of Pharmacology with a laboratory given up solely to that important subject. Every student ought to learn his physiology, pathology, and pharmacology in the same practical manner that he learns his medicine and surgery. But for this, of course, he requires the means. But how is this to be provided? His only hope lay in the adoption of some system of co-operation among the medical schools, under which it might be arranged that the teaching of these subjects should be concentrated at one or more foci, leaving the students subsequently to scatter over the different hospitals for clinical work.

YORKSHIRE COLLEGE.

THE introductory lecture in connexion with the medical department of the Yorkshire College was delivered by Mr. JONATHAN HUTCHINSON, F.R.C.S. Speaking of the uses of knowledge, he compared life to an evergreen, and said that we live in the most liberal manner upon the past, and are what we are in virtue of its former life, just as each successive generation of the leaves of the mighty pine has taken up the work of its forerunners, and, eager to do and die, has in turn submitted to the same fate. The result has been increasing growth and perpetual youth. There has been a permanence of life amidst unceasing change. The life that seems to be lost is simply transferred to others. The human tree, however, differs from the pine in this respect, that not only do generations of men inherit from the parent stock their life-vigour and its tendencies, but they are capable of receiving by direct communication with their predecessors a vast wealth of impulse and power which has not yet assumed a form in which its acquisition by inheritance is possible. The communication must be voluntary, and to it has been given the name of education. In Mr. Hutchinson's opinion, the law of limitation, in reference to memory, is not sufficiently taken into account in dealing with education. We cannot, he says, put in more than a certain quantity. Do what we will to improve our faculties, sooner or later a limit is reached, and we are then compelled, however reluctantly, to choose what we will keep and what we must surrender to oblivion. He would let those who had leisure, or industry, or special aptitude, cultivate to the utmost special sciences; but whether it is better to aim at a superficial acquaintance with many subjects, or a detailed familiarity with one or two, he unhesitatingly recorded his vote in favour of an acquaintance with things in general. The noblest faculty of the mind, the noblest emotion, was, in his opinion, love. His, he considered, was the best endowed organisation who could love the most widely and the most intensely, and his capability of affection was, to his mind, the test of the strength and vigour of character, because it implied sympathy, brotherhood, and perception of beauty; all these in turn involving the faculty of insight—the possession of knowledge, the power of loving wisely and well, being always proportionate to the intellectual development of the individual. Again, there was no such thing as wisdom apart from the matured results of hereditarily transmitted knowledge. No ignorant person born of ignorant predecessors could, in his opinion, possibly be wise. Having thus exalted knowledge, and claimed for it that it is the seed of that plant of which wisdom and love are the flower and the fruit, and described the teacher, whether working alone in a parish school, or as part of a great collegiate organisation, as engaged in the noblest vocation of man, the lecturer reminded his hearers that he had been speaking not of the kinds of knowledge which are obviously useful in the affairs of daily life, but of those which men and women may get or not as they like, and which are usually considered matters of personal pleasure and social adornment. Surely we ought to rank some knowledge of astronomy, geology, botany, natural philosophy, human history, and the like as essential to the formation of character. If the truths that they teach are once ingrained in the mind, so as to become the bases of all its processes, the person concerned has become capable of meeting the changes of life with patience; he has learnt the best of all lessons—the doctrine of continuity. It was impossible for him to despair of the world's pregress, or think lightly of the value of individual work. Upon the subject of Latin and Greek, Mr. Hutchinson expressed emphatically his conviction that as a matter of general knowledge it is a great waste of time and memory to teach them. He considered that the study of a language was for the most part a mere matter of rote memory, and that it encumbered rather than strengthened the mind. When Homer, Virgil, Tacitus, and Cæsar should cease to be school books, and when it should be held not discreditable to be acquainted with them in translation only, a sound knowledge of them would probably become a far more general possession than at present. The student unacquainted with Greek and Latin was at an immense disadvantage in reading in the sciences, as the text-books teem with words derived from those languages. Still, a good vocabulary was sufficient, and there was no need to study grammatical construction in detail. The use of terms taken from the dead languages was the mere survival of a bad custom, from which we should free ourselves. Never would the knowledge of the sublime facts of science become as wide as it ought until we effected reform in this matter. The terms in many instances could be expressed as easily and far more elegantly in English, and the gain would be immense. The mind unconsciously associated its own meaning with words compelled to be used which it did not understand, and thus often was not only left ignorant, but was actually led astray. A high-sounding name also often led us to believe that our knowledge was far more definite than it really was. The objection applied chiefly to descriptive names, and especially to appended adjectives. At the present stage of the world's progress the dead languages were far from being our most important acquisition; and the custom of exacting it was a great bar to real mental development. In connexion with this subject, he noted with pleasure that some of the leaders of the medical profession in Leeds had recently had the courage and common sense to break through the mediæval practice of writing prescriptions in so-called Latin. The learning of modern languages also was far too much insisted on. Time and labour consumed upon them would be better bestowed on other subjects. He did not believe the acquisition of a new language to be easier in youth than in adult age; and respecting modern languages, he suggested delay in learning them until a definite need for them had been realised. He did not decry any branch of learning, applauding at a distance the declaration of Bacon, "I take all knowledge to be my portion." But we should put a right relative value on things, and not waste time and labour in planting laurel bushes in mistake for apples; we must distinguish between knowledge which is fruit-bearing, and that likely to prove barren, however ornamental and fashionable it might be. In the development of objective teaching the formation of educational museums and the improvement of educational examinations were essential. The medical profession had always taken a large share in the formation of museums. Hitherto, though, they had been mainly collections of elements of proof too unwieldy in extent and too miscellaneous in character to be within the grasp of the general student. We wanted them specially arranged for the students, the specimens few in number, and by the aid of label and catalogue telling their own tale. It was to be hoped the time would soon come when every town, however small, and every school would have its collection of objects illustrating the history of man

and the natural sciences. These should be places where teachers would take their pupils, not once a year as a holiday outing, but frequently, and as the best method of serious study. What, indeed, hindered that every enclosed city square should be open to all, and that it should contain a miniature collection of suitable zoological and botanical objects, a conservatory, and a museum? As to the methods of examination, they should be employed to encourage industry and the acquirement of retainable knowledge; and they should much less than at present offer incentives to mere cramming. They should be more certain in their results, take a more accurate measure of those submitted to them, and their verdicts should be less liable to question and criticism on the part of teachers and lookers-on. These desirable objects would be attained only by making examinations more objective, and by taking more time for them. Addressing the students, he congratulated them upon their choice of a profession. The study of medicine had an advantage over many adopted as a means of livelihood in that it was full of scientific interest. They must carefully avoid taking a too narrow view of the life's work before them. Their training would fit them for assisting in the formation of social opinion in a great variety of directions. In the several districts where their future life might be cast, many, he trusted, would become leaders in the cause of general scientific education. In this matter their profession was little less than a sort of unendowed church of science, sending its pastors and teachers into distant parts as bearers of the torch of knowledge. Leeds had always held a high position in respect of her medical men. Talent, indeed, seemed to be hereditary there, after a fashion not witnessed anywhere else; and the Heys, the Teales, the Nunneleys, and the Chadwicks followed each other in line like princes in their own right. Nor did the repute of the Leeds School of Medicine and Surgery, great as it had been in the past, ever stand higher than at present. He urged them not only to dignify their calling, but to dignify themselves. In the comparison with which he commenced the address, he likened individual men to single leaves on a mighty pine-tree. As each leaf in quietness and confidence did its duty, so must it be with them. They must not think lightly of their own individual value in the world's work, and they must also think hopefully of the world's progress. The world, they might feel sure, never had a more happy day than that in which they were born; but lest they mistook his meaning, he would add that it would be happier still on the day they died; and in taking leave of them, he would urge the reflection that the ratio of its gain in happiness would depend in some degree, now and for ever, upon how they lived.

LIVERPOOL UNIVERSITY COLLEGE.

ON the 3rd inst. the annual distribution of prizes in connexion with the Medical Faculty of the Liverpool University College took place in St. George's Hall. Lord Derby, the President of the College, occupied the chair, and there was a very large attendance of ladies, gentlemen, and students, the platform being occupied by the various professors of the College and visitors.

In opening the proceedings, Lord DERBY said he need scarcely inform his hearers that one important event of the year had been the formal admission of the College to the Victoria University, which was effected in November of last year. The effect of that change is that to all residents in or near Liverpool not only is higher education provided at a very moderate cost—which was the case from our first opening,—but that that education will now bear the stamp of a university degree, the practical value of which to young men having to make their way in a profession was obvious. He believed that as Victoria University became better and better known the number of its students would continually increase, and its hold on the support and confidence of the public would be strengthened. The union with the Victoria University did not, however, in any way interfere with the independence and self-government of any of the federated colleges. It was in university matters alone that any kind of central control was exercised. His lordship concluded by referring to the addition in the way of laboratories it was proposed to make to the college buildings, and to the loss its staff of teachers had sustained by the death of Mr. Shadford Walker.

After Principal RENDALL had read the annual statement, Professor BRADLEY delivered the introductory address. He said: "Just 280 years ago Bacon, making a survey of the learning of his time, complained that one study was in England almost wholly neglected—he called it the study of universality. What Bacon meant by this word is not a question that we need discuss, but his expression the 'study of universality' will serve to indicate that want or defect of which I should like to remind you to-day—a want probably at least as great now as it was when Bacon wrote, and to be found extending throughout our education and beyond it..... By the sense of universality then, and the study of universality, we may understand the sense and study of the relation between the different parts of knowledge; the relation between the various pursuits of men; the sense of that unity which pervades and binds together subjects of education and modes of life which seem at first sight to have nothing to do with one another..... Let us look at the world of studies, with which we here are specially concerned. It is—you will allow me, for the sake of emphasis, to draw an exaggerated picture—like the Bodleian Library at Oxford, where each student works in a little cell all by himself, shut off from his fellows. In one you have a scholar intent upon the study of Greek words; in another a zoologist absorbed in the examination of a minute organism; in a third a historian tracing with infinite care the exact steps in a negotiation between Henry VIII. and the Pope; in a fourth a philosopher racking his brains in the analysis of the human will. Each of them is pursuing a worthy object; each contributing in his own way to the common stock; each furthering the good of man, and contibuting to the conquest of mind. But at the same time it is only too likely that each is almost ignorant of the subject at which his neighbour works.....The same tendency to specialism, of which this is an extreme example, appears in education. How often does it happen that a boy leaves school, or a young man the university—not an idle or dull boy or man by any means—who has attained a certain proficiency in some one or two lines, but knows nothing of other subjects—able to read and enjoy classical books, but ignorant of the physical universe—a competent mathematician, physicist, or chemist, but almost a stranger to the greatest thoughts of man, and for any real purpose unaware that he is the fellow-countryman of Cromwell or of Shakespeare?..... Clergymen, student, artisan, shopkeeper, poet, politician, doctor, artist, schoolmaster, manufacturer, merchant—these and many more are but so many diverse functions of one body; so many different directions in which a single human spirit seeks to advance itself; so many forces, distinct in character, but not really distinct in dignity, working to a result in which each is to share—bound together as indissolubly, as closely interested in each other's welfare, as completely contributing to a common life as the various parts of an animal organism. This is what they are really, but they are not so consciously, for they do not recognise it. To each his own function is all, for he does not regard it as a social function; he does not trouble about the other men's vocations, except when they touch his private life. ..... Now, there is much to be said on the other side, and this picture is undoubtedly an exaggerated one, otherwise this room would not be full of persons not engaged in education, and yet interested in education. We all know how many men and women there are whose whole lives are, in one form or another, permeated by the sense of community. And again, we all know that the tendency to isolation or specialism of which I have been complaining has its good side. It is far better for a boy to know one thing well than to have a smattering of many. If students did not concentrate themselves on one branch of knowledge, if they did not rigorously limit themselves, the progress of knowledge would be instantly and fatally retarded. The same thing is true of all the vocations of men. This is nothing but the principle of the division of labour, which is the indispensable basis of civilisation. But when all this is admitted in favour of the principle of specialism, the question will still recur, Is there not a truth also in that other principle on which I have tried to insist, and is it not true that in our devotion to the one principle we have far too much lost sight of the other? ..... A human being (not to speak of the most important part of him—his affections and will), has nerves and muscles, has senses, has a taste for what is beautiful as well as a memory and powers of reasoning. The old scheme of English education seemed intended to contradict this fact. It left the nerves and muscles to take care of themselves; in

boys for the most part they did so, in girls they often did not. There remained the education of the eye and ear and the sense for beauty on the one side; the education of the intellect on the other. We know how great an advance has been made in these matters during the last twenty years—a very great and general advance. But we still assume that the one really important part of male education is the training of the intellect, and if, of two boys leaving a public school and having otherwise a decent training, one were able to compare well in the classical languages or had got a considerable distance in mathematics, and another were able to draw beautifully, or to play the piano beautifully, most people would be almost shocked to hear it said that the second was every bit as well educated as the first. It seems possible to suggest some ways in which the dangers of specialism might be met. I will mention three. In the first place, it would be possible in universities to place before the students in the different faculties such a general statement as would bring out the connexion between their various studies, and emphasise the unity of purpose in them—so that, for example, anyone reading history or studying science should be kept aware that he is dealing with only one piece of the world, and that he ought to deal with it in a spirit that looks beyond the immediate object, and sees it as one part in a system of parts. There is a second way in which the sense of unity or universality in studies is quickened—the most vital way,—and that is when it passes insensibly from teacher to pupil, because the teacher is full of it; because his own study is to him not a heap of dry bones, but a living, moving, progressing thing, in which he feels the pulse of the common life-blood of civilisation, and which he knows from personal experience can bring to those who approach it rightly happiness, sympathy, and strength. There is, finally, a third antidote to the narrowness which our necessary specialism may produce. I mean a sufficient variety in studies. And I allude to this antidote with some misgivings, because I know how difficult it is to use it without abusing it. But where school education has not been many-sided enough, and where the student is not working under great pressure, the principle of variety may safely come in. Is there any reason why a student should not sometimes pass from the faculty of arts to that of science, or *vice versâ*, as is constantly done in Germany, so that he should be principally busy with language, literature, history, and the like in one year, and with some one or more of the physical sciences in another year? Or is there any reason why a student who spends all his university years in one faculty should not yet give some of his time all through to the other faculty? The student of language or history comes into contact with a new world, and uses—it is scarcely too strong an expression—a new part of his mind when he approaches a physical science; he does not know what the world is like—he does not know what his own mind is—till he has done so." Professor Bradley then mentioned the history of science as a subject which might advantageously be combined with the pursuit of some special study, and concluded an eloquent address by showing the importance of universality, not only to an individual, but to the State.

SHEFFIELD SCHOOL OF MEDICINE.

THE introductory lecture was delivered at Firth College on October 1st by Mr. R. J. PYE-SMITH, F.R.C.S. After welcoming the new students, the lecturer congratulated them on their choice of the profession, and dwelt on the nobility of its aims and practice. Referring to the risks from disease and from unjust actions at law, he said: "But all these and other risks must be loyally accepted by all who would enter the profession of medicine. We must operate, in spite of possible untoward consequences to ourselves; we must attend epileptic patients, in spite of their vagaries perchance falling terribly upon us; we must examine persons represented to be of unsound mind, and faithfully sign or refuse to sign certificates of lunacy to the best of our judgment, in spite of the annoyance and loss such duties may possibly entail upon us. In all such respects it should be true of the surgeon as of the Christian:

> "'He holds no parley with unmanly fears,
> Where duty bids he confidently steers.'"

He then proceeded to advocate a year's preliminary study after leaving school and before entering as a medical student. Amongst other subjects to be taken up at this period he laid special stress on biology and the use of the microscope, and mentioned also drawing, photography, carpentering, shorthand writing, and cookery. He recommended also the study of meteorology and climatology, and advised attendance on a course of instruction in first aid to the sick and injured and in nursing, as given in connexion with the St. John Ambulance Association.

Addressing the first year's men again, the lecturer urged them to the early formation of good working habits, and showed how the special senses required cultivation as well as the various faculties of the mind, whilst not omitting congenial recreation and rest. Having dwelt on the special importance of anatomy and physiology as the foundations of the healing art, he sketched the curriculum as now required for the double diploma by the conjoint examining board of the Colleges of Physicians and Surgeons, and then warned the student of the possibility of their turning out ill by neglecting the opportunities before them.

Turning next to the older students, the speaker congratulated them on entering upon their clinical studies, and insisted on the importance of paying special attention to pathology and to diagnosis whilst attending the hospitals. He warned them against conceit and pretending to cure where they knew they could not, and against a spirit of cynicism "bred of a knowledge that medicine is not an exact science, and is therefore liable to mistakes, together with a lack of clear and trustworthy knowledge of what may be definitely known—namely, those scientific principles and well ascertained facts on which so much of medicine depends." A just though modest confidence could be acquired and maintained only by habits of diligent self-education, and they should invoke duty in the words of the poet—

> "The confidence of reason give,
> And in the light of truth thy bondman let me live."

The lecturer then proceeded to address some remarks to the lay part of his audience. Having expressed gratification at the prospect of the incorporation of the Medical School with Firth College, he based an appeal for pecuniary help for a new building on the beneficent objects of the profession and the poor pecuniary rewards of its practitioners as compared with other professions and commerce. He pointed out the advantages to the community of having a flourishing medical school in their midst, and traced the history of the present movement for more adequate accommodation. The plans for the new school were exhibited, but some £2000 more were needed, he said, before it could be built. He spoke of the help afforded to the school by hospitals, and impressed on their managers the duty of seeing that no waste occurred in the materials for instruction at their disposal. Referring to experiments on animals, he applied Ruskin's words to the anti-vivisectors: "The first passions that come are the vain, the false, the treacherous; if you yield to them they will lead you wildly and far, in vain pursuit, in hollow enthusiasm, till you have no true purpose and no true passion left." And he predicted that Pasteur's work on Hydrophobia would strike a mortal blow to this ignorant and inhuman opposition to scientific investigation. He also urged the public to withhold objections to post-mortem examinations in cases where the medical attendant considered them important. He credited the future spread of elementary physiology with deterring the public from trusting in any of the surviving systems of quackery, and with putting them in a position to estimate rightly the uses and the abuses of specialism in practice.

In conclusion, he reminded the students of the motto of the school, *Ars longa, vita brevis*, and said: "In steady perseverance in your work, cultivate modesty in manner, exactitude in habits, sobriety in thought, truthfulness in speech, courage in action, and, above all, honesty in purpose. Now is your golden opportunity for preparation, and if you will now lay up a store of knowledge, it will, by right application, become wisdom, as fuel becomes fire, and you shall in due time be initiated into

> "'The secrets and the mysteries, whereof
> The bounds are space—the time, eternity.'"

ROYAL VETERINARY COLLEGE.

THE inaugural address was delivered by Professor TUSON, who, after giving a short history of the institution, enlarged upon the necessity of veterinary students having a sound preliminary education. Many improvements and alterations,

he said, had been effected in the College during the last twenty-five years. The teaching staff had been increased from five to nine, the course of study had been systematised, and a summer session had been instituted. A new museum, the theatre in which they were assembled, two class-rooms, a reading-room, a pupils' room, a pharmaceutical laboratory, a chemical laboratory, a dissecting-room, and various other buildings had been constructed, and this session a College library, containing books and periodicals, had been started. Another improvement of great importance had also been introduced—viz., the gratuitous medical and surgical treatment of animals owned by poor persons. Such animals, numbering about 500 a quarter, were treated for common ailments, and subjected to ordinary operations by advanced students under the personal supervision of the teachers. When to this means of study it was remembered that there were always from fifty to eighty animals in the infirmary, and that during last year there were 1145 horses examined for soundness and 1680 treated outside the infirmary, he was sure they would admit that everything was being done to render their professional knowledge as practical as possible. Having referred to the importance of anatomy and physiology as branches of study as well as of a sound theoretical and practical knowledge of chemistry, the lecturer asked the students to throw their whole hearts into the work, so that they might not only in due course obtain their diplomas with credit to all concerned, but that by their attainments and conduct in the practice of their calling they might adorn and exalt the profession to which they aspired to belong. The Professor, who was loudly cheered, concluded by referring with regret to the resignation of Dr. Cobbold, a man of world-wide reputation, whose withdrawal, he said, would be felt as a serious loss to the staff.

ARMY MEDICAL SCHOOL.

THE introductory lecture at the opening of the winter session of the Army Medical School at Netley was delivered by Professor F. DE CHAUMONT, F.R.S., on the 2nd inst. The principal subject of the discourse consisted of a review of the changes which had taken place during recent years in the organisation of the Army Medical Department, and the influence of these changes on the functions of medical officers and on the health of the army. Forty-eight surgeons on probation had joined to attend the session, forty being for the British Medical Service, and eight for the Indian Medical Service. Veterinary Surgeon F. Smith had also joined to attend the practical course of Hygiene at the school.

THE FOURTEENTH ANNUAL REPORT OF THE LOCAL GOVERNMENT BOARD.

THE annual report of the Local Government Board embodies, as a rule, a vast amount of statistical and general information, much of which is of interest to the medical profession. Pauperism, notwithstanding the increase of population, was of less extent in 1884 than in any of the preceding years; the decrease being mainly amongst outdoor paupers, the mean number of whom had diminished by 42,145 when compared with 1881, and due also to falling off in the number of adult able-bodied paupers and of vagrants. In the majority of counties there has also been a diminution in the expenditure on pauperism, the range of decrease being from 0·4 per cent. in Westmoreland to 0·2 per cent. in Suffolk; but in fifteen counties there was an increase which varied from 6·7 per cent. in the metropolitan portion of Middlesex to 0·1 per cent. in Sussex. As regards pauper lunatics, the steady increase observed for some time past still continues, and the number of these lunatics amounted on January 1st, 1884, to no less than 68,736; the patients in registered hospitals or in lodgings had, however, somewhat decreased. Several new pauper workhouses or infirmaries have been constructed or are in progress of construction in the metropolis, and in view of the improved accommodation and treatment which in-door paupers now receive, there has been a steady increase in their cost per head. That cost in 1874 was £9 5*s.* 3*d.*, whereas in 1884 it was £10 19*s.* 5*d.* Emigration of pauper children is still being carried out. The majority go to Canada, where special inquiries are now in progress on the matter; but others go to Australia, New Zealand, and a few find their way to India and Africa. In the northern district special distress had to be met during the year under consideration; the unions principally affected being Newcastle-upon-Tyne, Gateshead, Tynemouth, South Shields, Sunderland, Hartlepool, Stockton, and Middlesborough. The triennial instead of the annual election of guardians is extending, and is now in force in sixty-two unions.

Under the heading of Local Government and Public Health, it is pointed out that over £31,500,000 have been sanctioned in loans to sanitary authorities since the constitution of the Board. Last year loans for £2,324,258 were sanctioned in urban districts, and £135,988 in rural districts. No loan was granted last year under the Artisans and Labourers' Dwellings Act, 1875, whereas the sums previously granted have varied year by year from some £12,000 to over £1,000,000. There is a steady increase in the number of medical officers of health and inspectors of nuisances, so appointed as to secure repayment of salary out of the Parliamentary grant, the numbers now standing respectively at 1136 and 1037; and in an additional number of districts the practice of appointing district medical officers of unions to be medical officers of health has been abandoned. Several united districts have been formed during the year, one of these including the boroughs of Warwick and Leamington, together with the other sanitary districts within the Warwick Union, for the purposes of the joint provision of an infectious hospital.

Amongst the defaulting authorities against which orders had been issued under section 299 of the Public Health Act, we find that the Ely corporation have submitted a proper scheme for water-supply; that Cheshunt, against which a mandamus had to be issued, has applied for powers to take land for sewerage purposes; that Okehampton and Sandbach have applied for loans to remedy the defects complained of; and that Acton has satisfied the Board in the matter of the sewerage of that place. Cambridge has also been dealt with in connexion with the nuisances arising from want of drainage in Romsey Town, but the Commissioners have now set to work, and so done away with the need for further compulsion. In other cases a similar course has been followed. Referring to some of the reports of the engineer's department, we are reminded that Mr. Thornhill Harrison described the Thames as fit only to "be compared to a huge sewage-tank"; and much the same opinion was arrived at by Mr. Taylor in connexion with the state of the Lea. It is curious that, when all are agreed as to the reality of these grievances, so little action is taken with regard to them.

In connexion with the Sale of Food and Drugs Act, we learn that 52 counties and 176 boroughs have analysts approved by the Board, and that the increase in the number of analyses made was 3303 over those last reported on. The articles found to be most adulterated are the following: spirits, butter, coffee, milk, and drugs. Of some 10,000 samples of milk analysed, over a sixth were condemned. But, as is stated in the report, the number would probably have been greater were it not for the fact that the difficulty of ascertaining by analysis whether the milk is naturally poor or has been artificially diluted, has not yet been overcome, and this circumstance must necessarily hinder the analyst in forming an adverse judgment on a given sample. In one case it was ascertained that solids had been added to compensate for the loss of cream, the milk being first diluted with its own weight of water and then being thickened with starch.

The work which is under the supervision of the medical officer of the Board is next briefly dealt with, but a separate report on these matters is promised in the form of a supplement. This we hope to deal with hereafter, but in the meantime it is satisfactory to note that, whilst vaccination is maintained at much the same standard as formerly for the country generally, the returns for the metropolis are better than they have been for some years past. To the towns heretofore adopting a system of compulsory notification of infectious diseases there were added in 1884 Chester, Croydon, Dewsbury, and York.

HYDROPHOBIA.—This terrible disease seems to be more than usually prevalent at the present time. Several inquests on victims to bites of rabid dogs have recently been held, and extra precautionary measures would appear to be indicated.

THE LANCET.

LONDON: SATURDAY, OCTOBER 10, 1885.

THE 1st of October has come and gone, and the "introductories" are once more before us for such criticism as they deserve, or may suggest. It does not do to be too critical on performances of this kind. The duty comes only once to most men, and therefore never becomes easy to them. It is understood to make some men miserable for several months beforehand. We do not pretend to explain the fact, or to justify it; but good men have confessed as much. The explanation may be not only in the difficulty of investing a well-worn theme with novelty, but in the misgivings as to the behaviour of the audience. In some schools this is certainly such as to make the anticipations of a modest orator unpleasant. Some gentlemen, too, it must be confessed, are not happy in the selection of subjects. It is not a little curious that two of the London orators selected for the consideration of the poor students on the opening day the unsatisfactory state of the law as regards lunatics. It would be difficult to find any subject less cheering or less suitable for an introductory lecture than this. The only explanation we can imagine for selecting such a subject is that medical men have too few opportunities of airing their views on questions gravely affecting them and the public. Our professional corporations are for the most part close and mysterious guilds, as Mr. HOLMES, with considerable effect, showed in his address at St. George's, in which the members of the profession find no *locus standi*, and their experience, opinions, and grievances find no voice. On no other theory can we explain two gentlemen eagerly using the occasion of an "introductory" to descant on the reform of the Lunacy Laws. Even Mr. HOLMES's discussion of the constitution of the Colleges and of the Medical Council was somewhat hard upon the students, who had no means of either judging the facts or of altering them.

Mr. HOLMES, Mr. PEPPER, and Mr. SCHAEFER, in addresses otherwise very different, all touched upon the great question of the rivalry of the Scottish schools, and the way in which it was to be met. Mr. HOLMES evidently is possessed with a great conviction of the omnipotence of the two Colleges if they could be combined into one great university of medicine for England, or possibly for the British empire. It should be possible to treat this subject without unduly disparaging the Scotch universities, to which, we presume, Mr. HOLMES alludes, in a passage somewhat incongruous with the rest of his address, which was characterised by dignity and good sense. It runs as follows:—

"Men of good education and of sound experience—licentiates of our great Colleges—complain that any young jackanapes can go away to some trumpery university and return with a degree enabling him to pose in the eyes of the public as their professional superior; and there is no central authority to stop this nefarious traffic, or even expose its real nature."

We lament as much as Mr. HOLMES does the want of a central authority, strong and disinterested; but this is not to be remedied by the students whom Mr. HOLMES addressed nor by the use of language which can only import bad feeling into a controversy in which there is ample work and room for the best temper and the coolest judgment. Parliament is not likely to touch these subjects, and it is certainly helpless to dispose of them, unless the profession and its great representative bodies can arrive at some fair approach to co-operation and unanimity. There was something to admire in Mr. SCHAEFER's innocent and unquestioning faith in Parliament as the divinity that would educe order out of the chaos of London schools: "I would invoke the assistance of Parliament and cut the Gordian knot without more ado; I would have at one or more centres laboratories endowed by the State." What a pity that Mr. SCHAEFER is not Chancellor of the Exchequer! But even then he would find himself sore let and hindered, and Parliament averse to all such cutting operations as he proposes. We cannot, however, leave Mr. SCHAEFER's address without noting some very important points on which he expressed opinions of much interest. On one of these points the difference between him and Mr. JONATHAN HUTCHINSON, in his most admirable address to the Yorkshire College, Leeds, was acute. The very difference will have the good effect of attracting more and more attention to the question of the use of the dead languages. Mr. HUTCHINSON says that, as regards the progress of English students in general, it would be a great gain if the dead languages were forthwith honourably buried. And he deals powerfully with a minor argument of Mr. SCHAEFER's for their being studied—viz., that without them scientific terminology cannot be understood. Mr. HUTCHINSON is certainly right in urging that this terminology is often a hindrance to earnest, if unlettered, students of nature and science, and ought, in some books at any rate, to be replaced by honest English words. The only way in which we can do justice to his address is to advise everyone to read it. Mr SCHAEFER expressed his dissatisfaction with the examining system, and said he would himself rather trust to the certificate of a recognised teacher, who has watched the student's work, than to the report of an examiner, who only sees the student on one occasion under strange conditions. As was natural, he vindicated the claims of Physiology to equal study with Anatomy, and he repeatedly and strongly urged the necessity for a co-operation of schools and the establishment of common central laboratories for the practical study of Physiology, Pathology, and Pharmacology.

Not the least interesting address of the session was that at St. Mary's, by Mr. PEPPER. He, too, was rather hard on the Scotch schools, though we doubt not they will survive it. His advice to students on the best modes of recreation comes with much effect from one who has so well used the "sweet vicissitudes of rest and toil." Nor must we omit to notice the address of the Bishop of LONDON at King's College, in which he showed the sharp limits of scientific knowledge as regards the origin of life and the great region beyond of unexplored mystery, which will ever continue to excite the reverent and religious sentiments of thoughtful men.

LORD DERBY gave a very inadequate account of Professor BRADLEY's discourse on "the study of universality," when,

after propounding the sophism, "There is no use in saying we ought not to be specialists; we have got to be specialists if we mean to do anything," he made the reservation, "but it is just because we must be specialists in practice that we are bound to counteract the consequent tendency to narrowness by an enlightened appreciation of what other men are doing." There is much more than this in "the study of universality." BACON contemplated by the phrase, and Professor BRADLEY interpreted it, in a far wider range of significances. We use the plural advisedly, for "the study of universality" involves and implies divers views and purposes. That which Professor BRADLEY understood and strove to inculcate under this term is "the sense and study of the relations between the different parts of knowledge," and what grows out of these relations.

The subject matters of knowledge in all its forms and branches are facts, and facts are solid things with manifold faces and properties, which need to be perceived and studied individually, but which cease to be legitimate subjects of knowledge the moment it is forgotten that they are merely faces and properties. Thus colour is really inseparable from form. To specialise the idea of colour without form is to ignore the fact that colour is simply the breaking up of light by form. Specialism is founded on ignorance of the underlying relations which subsist between parts of a whole, between integers of a sum which in truth is indivisible. As an artifice for the division of labour and the concentration of energy, it may be justifiable to tell off one man to reckon what we call minutes, and another to measure miles; but time and space are not by this device of ours rendered separable. KEPLER'S law, that "areas swept out in equal time are equal," is not only as true as ever it was, but an embodiment of the idea of universality, sternly defiant and corrective of our petty artifice of specialism.

The point we want to make clear and insist most strongly upon is that true knowledge recognises the unity of the subjects into which false or imperfect knowledge breaks up the subject matter of intelligent study and research. The several branches of knowledge, in so far as they are real, always converge. The nearer we approach to a close acquaintance with what we call "facts," the more clearly do we see their inter-relation. The growth of specialism does not result from the growth of science, as hasty generalisers are wont to assume. Take the history of progress in chemistry as an illustration in point. The prosecution of studies in this branch or walk of science led to the discovery of what at first seemed to be an outlying province—the chemistry of organic life; but this has since been found to constitute the inner field of physiology; and physiology is rapidly displaying itself as the heart and centre of anatomy. Indeed there are not wanting tokens that before long the cognate branches of this department of knowledge will be merged in one subject—the science of life or biology—which may even, by a better reading of the records of Nature's usage in the production of forms which we now regard as distinct—namely, crystals and cells, come to comprehend and link together the chemistry of "organic" and of "inorganic" matter as essentially and absolutely one. Specialism in knowledge is not a fruit, but a rootlet. The student begins with the study of one subject, but as he advances he finds that others force themselves on his attention. If he studies languages he learns to understand men, and from a linguist he comes to be an anthropologist; then he discovers that national and racial peculiarities are the effects of physical and geographical conditionings; geology and astronomy are soon found to be related; and in direct proportion as he presses forward in the pursuit of knowledge does he pass from specialism to the study of universality.

The failure to perceive this convergence of the paths of knowledge is, we believe, the cause of more misconception and bad practice than almost any other mistake which is made by the students and teachers of science. Professor BRADLEY struck an excellent keynote in his address at Liverpool, and we heartily hope it may not have been sounded in vain. There is too much specialism in science, and particularly is it an evil in the so-called science of medicine. Health is the integrity of functioning in a living organism. Function is not only, as we know, the *effect* but the *cause* of organisation. In the order of development function precedes organisation. Function, in physiology, is organised habit, embodying conformations of structure—in anatomy, histological or general, as the action necessitates. This is the law of development. Health preservation is the avoidance of disorder in function, and the maintenance of integrity in organisation. The art of healing is the art of rectifying errors in function, and, as far as may be, repairing faults of organic structure. The highest development of the "healer," or practitioner of the art of healing, is "a physician who can use his hands." It follows that the *true* surgeon is a better practitioner than the mere physician. This may seem a reversal of the received idea, but it is the right notion. The practitioner of the future will be no specialist. He will not even be a specialist in medicine; much less will he be a specialist in surgery, or in any branch of medicine or surgery. He will be a *general* practitioner of the art of healing—a scientist who so prosecutes his studies of the physico-mental or psycho-physical organism of man that, with an intelligent knowledge of Nature's laws of health in relation to the genus *homo*, he is able to bring general principles to bear for the relief of suffering and the rectification of disorder in function and structure. There is no greater fallacy than that involved in the plausible but sophistical aphorism, "We have got to be specialists if we mean to do anything"; a sophism which is as faulty and mischievous in regard to every other department of knowledge, or study, or practice, as it is in relation to that in which we are chiefly concerned to expose it.

IT has been seen that the Contagious Diseases Acts were instrumental in eradicating juvenile prostitution, and reducing to a considerable extent brothels and prostitutes within the districts to which they were applied. They were also the means of causing lock hospitals and wards to be provided with an aggregate of 626 beds, thus eclipsing all the voluntary efforts of a century and a quarter. It has also been shown how disastrous has been the result of the resolution carried by a snatch vote in the House of Commons two years and a half ago, which has been the exact reverse of what was stated by the Select Committee of 1869. That committee reported: "Prostitution appears to have diminished, its worst features to have been softened, and its physical evils abated." Now it may be said without the

least exaggeration, of the same localities: "Prostitution appears to have increased, its worst features to have been hardened, and its physical evils intensified." It will be well now to consider the subject of the compulsory periodical examination of prostitutes, which has always been the chief difficulty with which the supporters of these Acts have had to contend, and the adverse opinion respecting which, carried by a majority of the House of Commons, caused the practical, though not actual, repeal of these Acts. It will be necessary first to take another glance at their early history. The Act of 1864 was the first attempt to grapple with the evils which had been described by the Select Committee of 1862 as appalling. It provided that any common prostitute who was suspected of being infected with venereal disease, within the limits of certain districts, should be taken to a certified hospital for examination, and, if found to be diseased, should be detained for a period not exceeding three months. And to show how well the police performed their duty, as well as the terrible state of these women, it may be mentioned, that out of 202 women first examined in the Devonport district (which includes Plymouth and Stonehouse) all were found to be diseased! At Portsmouth, out of a total of 331 prostitutes, 294 were found diseased. Of 66 examined at Sheerness 49, and of 216 at Chatham 147, were diseased! These figures go very far towards showing the absurdity of one objection urged by opponents of these Acts—viz., that in many cases the examiner will fail to detect disease. Here, out of a total of 815 women, found in four districts and suspected to be diseased, 692, or 84·9 per cent., were actually found upon examination to be diseased! This Act was found to be defective for reasons which will be obvious to all who have had any experience in the treatment of venereal diseases among prostitutes, whether as in-patients of lock hospitals or wards, or as out-patients of general hospitals. Long before these women know that they are diseased, and still longer before anyone would suspect them of being so, they have already done an incalculable amount of mischief and infected many, besides aggravating their own cases. Hence the principal feature of the Act of 1866, which was founded on the recommendations of the committee appointed in 1864 under the presidency of the late Mr. SKEY, at that time ex-president of the Royal College of Surgeons. That committee recommended, among other changes in the Act of 1864, that "a periodical inspection or examination of all known prostitutes be made compulsory under a well-organised system of medical police." And here may be noticed another very absurd objection urged by the opponents of these Acts, which would not deserve notice were it not still persistently repeated. It is said by them that these Acts were passed hastily, and without due inquiry; in short, that they were smuggled through Parliament. The first Act was passed just two years after the subject had been dealt with by a Select Committee of the House of Commons, and was actually opposed in its passage by Messrs. HENLEY and AYRTON. The second Act was founded upon two years experience of the first Act and of an exhaustive inquiry extending over sixteen months by eminent physicians and surgeons, whose names were a sufficient guarantee of the soundness of their recommendations. It is true that one of their number (Dr. GRAHAM BALFOUR) was a dissentient on this very point of the periodical examinations, but he subsequently changed his views when he learned, from his official position, their great value in lessening constitutional syphilis. It is true that the Royal Commissioners in 1870 recommended that the periodical examination should be discontinued, although they admitted that "it was the most effectual mode of dealing with venereal disease." As often happens in the reports of Royal Commissions, one of the dissents is the most valuable part of it; and this was certainly true of the dissent signed by the late Lord HAMPTON (then Sir J. S. PAKINGTON), Lord HARDINGE, the late Sir J. SALUSBURY TRELAWNY, Drs. G. E. PAGET and WILKS, Mr. TIMOTHY HOLMES, and Mr. G. W. HASTINGS. For reasons fully given, but too lengthy to repeat, they concluded "that it is only under a system of periodical examination that either venereal disease can be speedily detected and effectively checked, or police be safely entrusted with duties which must be admitted to be, under the most favourable circumstances, of a difficult and delicate nature, requiring every safeguard which prudence can suggest.....When we turn to the probable moral effects upon the women themselves of the periodical examinations which are so much objected to, we must contend that any disadvantages which may have attended them are more than counterbalanced by their good moral and physical results." It must be remembered that these examinations are conducted at stations selected by Government officials by the visiting surgeons, in presence of a female attendant. The women go to the surgeon, not the surgeon to the women, and therefore the objection that these Acts resemble the continental system is not true. No examinations under the Acts are ever held in brothels, and the regulations effectually prevented what occurs in London and elsewhere —viz., girls being practically prisoners in brothels. These greatly abused periodical examinations were the means of bringing many of these prisoners both to light and to liberty. In spite of the recommendation of the Royal Commissioners, the examinations were not abolished, but continued until 1883. In the previous year the Select Committee of the House of Commons, which had sat since 1879, issued their report, and thus spoke with no uncertain voice as to the value of this part of the Acts:—

"The opposition to the Acts assails the whole principle of sanitary supervision of prostitutes by the State, but beyond doubt the periodical examination is the feature of the Acts that has caused most offence, and has been especially selected for attack. Your Committee are of opinion that if abandoned women could be induced by any method to submit themselves to medical supervision and care, it would be unjust and unwise to continue the system of compulsory periodical examination; but while the medical witnesses who support the Acts and understand their administration assert that the process is necessary, the opponents, when asked to suggest any other means by which prostitutes in subjected districts could be induced to submit themselves with regularity and promptness to the supervision and treatment necessary for health, have failed to do so. If any such means could be devised and brought into operation, your Committee would not hesitate to recommend the abolition of compulsory periodical examination. No such means being shown to exist, they recommend its maintenance. The Royal Commission of 1870 recommended the abolition of periodical examinations, and the resumption of the main provisions of the Act of 1864. This statute, while

not insisting on periodical examination, subjected to compulsory examination prostitutes reasonably suspected of being infected with venereal disease. It appears to your Committee that the principles of the objections taken to the examination, under the Act of 1866, apply equally to the Act of 1864, and that while the course recommended by the Royal Commission would deprive the system of its chief means of detecting disease and preventing its diffusion, it would not satisfy the opponents of the system. It would be rejected as a half measure, and would lead to renewed agitation. Your Committee for these reasons cannot assent to the recommendation of the Royal Commission of 1870, that the main principles of the Act of 1864 should be substituted for the periodical examinations required by the Act of 1866."

So long as the Acts continued in full force, and the examinations were held, disease was detected in its earliest stage, and the shocking cases seen in voluntary lock hospitals were unknown among the registered prostitutes. Moreover, there was also a remarkable difference between the ratios of disease in those newly registered and those who had been previously so. Taking the last report available (that of 1881), the ratios for that year were as follows:—

Districts.	Newly registered.	Previously registered.
Portsmouth	34·32	6·31
Devonport	41·89	8·92
Sheerness	8·33	3·33
Chatham	42·79	7·01
Woolwich	30·25	6·21
Aldershot	56·46	18·32
Shorncliffe	41·30	10·53
Colchester	54·93	2·94
Greenwich	39·72	21·11
Dover	12·82	3·13
Canterbury	35·90	7·14
Deal	36·36	11·11
Southampton	33·03	9·89
Gravesend	5·56	None
Maidstone	66·67	„
Winchester	33·33	„
Windsor	25·00	„

From these ratios it may be imagined what must have been the result of the abolition of these examinations, and the condition of the prostitutes now plying their trade in the above localities. Mr. TREMAYNE, one of the members for South Devon, truly described these inspections as a "horrible necessity," and seeing the horrible results which they are designed to prevent, there can be little doubt as to what would be the verdict of the public if they could once realise the fact that a large proportion of the prostitutes in our streets are at one and the same time selling diseases and aggravating their own condition. In all that we have said so far, we have advocated these Acts as being beneficial to the women themselves, and while we cannot ignore the effects upon soldiers, sailors, and civilians, that is the ground we shall still continue to take.

THE health of the brain is as dependent on the blood-supply as it is on the perfect action of its intimate tissues. The brain is acted upon by the circulatory system, and it reacts on the vessels. The association is mutual, but a rather curious fact has come out in the study of cerebral pathology, and it has been fully recognised by our greatest neurological philosopher, HUGHLINGS JACKSON. It is to the effect that most diseases of the brain originate in tissues which are not strictly nervous. Hemiplegia is not a disease of the nervous system. Such a statement is as perfectly true as it is perfectly false; but the paradox is easily explicable. A very careful and systematic study of diseases of the circulatory system in the insane is contributed by Dr. GREENLEES in the current number of the *Journal of Mental Science*. The task to which Dr. GREENLEES applied himself was a laborious one, but has yielded results, if not commensurate with the labour, at all events very instructive.

The first point that occupied attention was the condition of the heart and vessels amongst the living insane. Table II. in the paper gives an account of 672 individuals investigated in the above particular. There were 323 males and 349 females. Of the total number, 86, or 13 per cent., were found to be suffering from appreciable heart disease, and 294, or nearly 44 per cent., had functional disorders of this organ. The term functional cardiac disorders is made to include a motley group: weak heart-sounds, irregular rhythm, reduplication and accentuation of sounds, loud and tumultuous action, with recognisable variations of the pulse. These functional disturbances were noted as much more frequent among the acute cases, and Dr. GREENLEES attributes them to the excitement of the nervous system that generally prevails in acute disorders of the mind. It would appear that heart disease occurs with greater frequency among chronic types of insanity, such as dementia and imbecility, for it was found in one out of every four cases. It is a more frequent accompaniment of mania than of melancholia, although the proportion of cases of cardiac functional disorders is greater in the latter condition. "In every large asylum cases are to be found in which the circulation is impaired, the pulsation feeble, and the extremities cold, or even livid and swollen. These cases are generally to be found amongst two classes of patients: (1) recent cases of acute melancholia; and (2) old-standing cases of dementia or other chronic forms of insanity." Table III. shows the average pulse-rate in the insane at different times of the day, as compared with the rate on admission. The figures in this table agree closely with those published by Dr. CLOUSTON in the *Journal of Mental Science* of April, 1863. Another table represents the proportion of deaths from heart disease and cardiac lesions during a period of five years in the Cumberland and Westmoreland Asylum. A reference to the table proves that during this period 222 autopsies were made, and that the heart was diseased to such an extent as to constitute itself the primary cause of death in thirty cases, which is about one in every seven cases examined. In 153 cases more, or 68 per cent., there were notable changes in the heart and vessels. We have not space to go further into the subject of Dr. GREENLEES' paper, but we may present a portion of his general summary and conclusions:—That heart disease occurs with greater frequency among the insane than the sane; the causes of this difference may be largely explained. That the clinical symptoms of mitral regurgitation in the living insane and mitral disease with hypertrophy of the left ventricle at the autopsies are the most common affections. That the hearts of the insane are heavier than those of the sane, this condition being more especially to be noted in general paralysis, in which the heart is very frequently hypertrophied. That

the arteries are frequently affected in the insane; but that, with respect to age, atheromatous degeneration of the arterial coats does not appear to occur earlier in life than among the sane. In general paralysis, however, thickening of the arterial tissues, or even atheromatous degeneration of the cerebral arteries, occurs quite independently of the age of the patient, and appears to be influenced more by the duration of the disease than by the age. The eleventh conclusion is a little remarkable and apparently contradictory: "That among the sane heart disease appears to exercise an important influence on the mind, changing the temperament and altering the character of the patient, and that this change may become so prominent that the psychical phenomena exhibited may be actually those of insanity." The last conclusion of the clinical portion of the paper implies that a cardiac lesion may be a most powerful predisposing cause of insanity, a proposition which is practically included in the eleventh clause. Two coloured plates illustrate the pathological section of the article, which is based on the microscopic examination of sixteen brains.

Annotations.

"Ne quid nimis."

THE LOW DEATH-RATE IN LONDON.

THE public health during the past summer, judged by the Registrar-General's weekly mortality statistics, was exceptionally favourable. This was undoubtedly due, in great measure, to the generally low temperature that prevailed during August and September. Without attaching undue importance to the value of temporary death-rates, the low rate of mortality recently recorded among the four millions of the London population is specially noteworthy. During the five weeks ending the 3rd inst. the annual death-rate in the metropolis averaged only 15·4 per 1000; the mean rate recorded in these five weeks was lower than the rate recorded in London in any previous single week since the Registrar-General's weekly bills of mortality were first published in 1840. In the week ending September 26th the rate fell to the unprecedentedly low figure 13·8, and the highest rate in the five weeks was 16·0 in the week ending last Saturday. September is generally one of the healthiest months of the year; but the nearest approach to so low a London death-rate in that month occurred in 1873, when the mean rate was 16·8, and 1·4 above the rate recorded last month. The main point of interest in this remarkably low death-rate in London is its significance, or, in other words, the extent to which it may be accepted as a proof of improved sanitary condition. This is a problem which probably does not admit of a definite solution. The fact that this low death-rate was in great measure due to the exceptionally low numbers of deaths resulting from the principal zymotic diseases, especially from scarlet fever and enteric fever, as well as from diarrhœa, affords, however, clear evidence of the connexion between this low death-rate and the results of improving sanitation. The London death-rate during the thirteen weeks ending last Saturday averaged 18·1 per 1000, and was 1·9 below the mean rate in the corresponding periods of the nine years 1876–84. Three times in those nine years did the summer death-rate fall between 18 and 19 per 1000, so low a rate in more remote periods being almost without precedent. It will be interesting, when the facts become available, to compare the death-rates that have recently prevailed in the various metropolitan sanitary areas, which invariably show such marked contrasts.

THE LATE EARL OF SHAFTESBURY.

THE regret that is felt at the decease of Lord Shaftesbury is not such as would be created by the passing away of a younger man whose work was still unaccomplished. If ever a man lived for a purpose and lived to see that purpose attained, it is the veteran philanthropist our country has just lost. The whole of his life was devoted to her good, the good which comes from the improvement of the condition of her poorest children. Lord Shaftesbury lived to see his earliest efforts in promoting the education of poor children by the formation of ragged schools so fully accepted, that a great system of national education has been their outcome. Again, his devotion to the interests of working people, and especially the women and children of this class, has led to these interests now being safeguarded by the State; the passing, and subsequently the successful operation, of the Factory and Workshops Acts are directly the offspring of Lord Shaftesbury's work. Probably no one knew better than the deceased earl the influence of home conditions upon the health and the morality of the inhabitants of the courts and alleys of our large towns. Many years before any general interest was felt in the important question of the housing of the working classes, Lord Shaftesbury, with a few friends, determined to solve the problem whether the unspeakable wretchedness of these people was due to the circumstances under which they were living, or whether their depravity was so great that they necessarily created these conditions for themselves. Upon this point his evidence before the recent Royal Commission is of the greatest value, for he related how the removal of some of them to better homes led to their reformation. The earliest work in this direction was the conversion, under his superintendence, of a number of dilapidated houses into habitable dwellings, which could be let at a rental making a sufficient return for the outlay. Later the erection of better dwellings for the working classes in districts outside the metropolis not only provided suitable homes for a large number of persons, but helped to show that financially there was no difficulty in the way of such provision which could not be overcome. With regard to still poorer persons in the metropolis, Lord Shaftesbury held the view that the local authorities might themselves undertake the duty of providing homes for them, and with this object the Labouring Classes Lodging Houses Act was passed. As yet no advantage has been taken of this piece of legislation, and it is doubtful whether the time has yet come for its adoption. Lord Shaftesbury nevertheless lived to see an amount of good result from his individual action greater than had attended the work of any other philanthropist of modern times, and assuredly it may be said of him that he had not lived his long life in vain.

NITRO-GLYCERINE TABLETS.

THE introduction of tablets of nitro-glycerine into the British Pharmacopœia has apparently not given universal satisfaction. It is objected that no characters or tests are mentioned by which they can be recognised, and that the mode of preparation is left entirely to the discretion of the manufacturer. Considerable diversity of opinion evidently exists amongst chemists as to the appearance which should be presented by these tablets when made. During the past week we have received several samples—most of them by post, in contravention of the postal regulations,—and we are surprised to find that no two specimens are alike, or, in fact, bear the slightest resemblance. They differ in shape, some being round, others oval, and others again square; and they differ in colour, some being white, some black, and others brown. Some are stamped prominently with the words "Nitro-glycerine, P.B.," whilst others have nothing to indicate

that they are not harmless chocolate drops. They evidently differ in composition, for whilst some taste of gum and aromatics, others taste only of chocolate. Some induce a persistent headache even when handled, whilst others have no such effect. The price, too, is apparently subject to fluctuation, one manufacturer producing them at 5*s.* a pound, whilst another sells them at a price which, unless we entirely mistake the meaning of his advertisement, is simply fabulous. The translation of the word "tabellæ" is evidently a source of difficulty, for in some cases it is rendered "tablets," whilst in others "pastil" or "lozenge" is preferred. The dose is given as one-hundredth part of a grain, although it is well known that the drug is almost inert unless its full physiological action is produced. The directions on the printed labels are in many cases objectionable, especially when the tablets are recommended for "angina," neuralgia, headache, asthma, and sea-sickness. One chemist states that they must not be "given to children." If by this is meant that they should not be sold as children's sweets to every chance comer, we entirely agree with him; but if it is intended that medical men are not to prescribe nitro-glycerine for young people if necessary, we think he has exceeded his province. What we require for medical purposes is the 1 per cent. alcoholic solution of nitro-glycerine, which is safe, inexpensive, and, above all, readily dispensed.

RESTRICTIONS ON DISPENSING BY MEDICAL MEN IN FRANCE.

DR. LANDOUR writes to *Le Concours Médical* complaining of the hardships of the present laws concerning the supplying of medicines by medical men. It seems that the law says that "doctors *established* in communes where there is no pharmacist with an open shop may furnish medicines, but may not themselves keep an open shop." If now a doctor who has the right of dispensing is sent for to a town where there is a pharmacy, though he may have medicines with him, he cannot supply them, because he would then be infringing the rights of the pharmacist; and as these rights are claimed for a distance of eight kilometres round the pharmacist's shop, the position of both doctor and patient in an urgent case might be not only ludicrous but serious, if a messenger had to be sent five or six miles for some important remedy which the doctor had all the time in his pocket, but which he dare not make use of. Again, suppose the doctor to be called to a patient in a commune other than that in which he is established where there is no pharmacy even within eight kilometres, strictly speaking even here, according to the writer, he has no right to supply medicines. The wish is expressed by the writer of the letter that all doctors might have the right to supply *urgent medicines*, and he hints incidentally that, as a matter of fact, prudent doctors usually do carry such about with them, and use them in defiance of all laws.

TOO MANY PRACTITIONERS IN BELGIUM.

COMPLAINTS of overcrowding in the medical profession are not confined to this country. The subject is attracting some attention at the present time in Belgium, where a paper has been prepared by Dr. de Windt, at the request of a Medical Society, giving the reasons for the existing state of affairs, and suggesting remedies for it. Dr. de Windt complains that there are often three or four doctors in a locality where one would suffice, and the necessary consequence is a lowering of fees, and in some cases a resort to irregular methods of practice. The writer gives a table showing how the number of practitioners has increased since 1831, when there were only 1816 of all grades on the rolls. During the next nine years the number was increased by 357, a great many of whom were very insufficiently educated in general subjects, because of the suppression of some of the university faculties of arts; besides which the medical examinations, up to 1835, while they were held by commissions selected exclusively from the professors of the faculties, were, according to Dr. de Windt, little more than matters of form. From 1835 to 1849 a better plan was adopted, that of a single jury sitting in Brussels, which was the only examining body empowered to grant licences to practise. This board was apparently much stricter in its requirements than the previous one, as during the interval from 1840 to 1850 the numbers of the profession were only increased by thirty-six. In 1849 a system of combined juries was adopted, which was less satisfactory, and in 1876 the universities were authorised to grant diplomas which were sufficient titles to practise. Under this system, which is still in operation, the increase is considerable, amounting in a single year (1882 to 1883) to as much as 161. It seems that the preliminary examination is not sufficiently severe, and that certain "specialists" are allowed to practise without taking a medical degree. Dr. de Windt thinks that leave to practise is given too easily to foreigners; but, considering that from a table he appends to his paper this privilege has only been granted to twenty-nine such applicants during the eight years from 1876 to 1884, there would not appear to be ground for very serious complaint on this head. The total number of Doctors of Medicine in 1883 was 2234, besides which there were fifty-four practitioners who were qualified as surgeons, accoucheurs, and officers of health previously to the abolition of those diplomas in 1835.

PROFESSOR VIRCHOW ON ACCLIMATISATION.

AT a recent congress of German naturalists and physicians—a scientific body resembling our British Association, but of wider scope, since it includes medicine—held at Strasburg, Professor Virchow gave an address upon Acclimatisation. He said that he would not discuss the political question as to the propriety of Germany forming colonies, but would point out how wide was the scope for scientific investigation into the subject, an inquiry which might influence State measures. He drew attention to the Amsterdam Congress of Colonial Medicine last year as evidence of the growing desire to learn more concerning the conditions of life and the changes experienced in the human organism under altered climatic influences. When an individual goes to a very different climate he is mostly at first uncomfortable, and after some weeks finds his organism regain its equilibrium; he has accommodated himself to new conditions; his organs have endured material change; he suffers from climatic indisposition or disease. Although the French and English have published much upon the subject, yet researches upon the special changes that precede the onset of disease are entirely wanting. On the other hand, the clinical study of tropical disease has been very much advanced. Whoever studies acclimatisation must do so with a view to establish certain geographical limits of ethnological provinces analogous to botanical and zoological provinces. The Professor next proceeded to inquire how far the white races were known to be capable of acclimatisation, and showed that the Semitic were much more capable of it than the Aryan races; and amongst Aryans, the southerners (Portuguese, Spanish, Maltese, &c.) were more so than the northerners. Mixed races with strong Semitic admixture are more easily acclimatised than the pure Aryan stock. These races have developed in North America, the French in Canada, the Yankees in the United States, the English in Australia, but not in its northern, hotter parts. All these inhabit latitudes not far removed from the European, and yet they often become sterile, and the population decreases. Individuals born in

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the new country of the immigrant population never exceed three generations—for example, the English in India; and in spite of attempts to consolidate the Aryan colonisation of the Indies by means of sanitary measures, it does not succeed. Medical officers of the navy and merchant service, and others, should study these conditions in the light of physiology. What is it that is most at fault? Is tropical anæmia a diminished formation or an increased destruction of blood? Tropical anæmia is found not only in regions where malaria, pernicious relapsing fever, dysentery, or yellow fever prevails, but it occurs apart from these diseases. This increase in blood disintegration excites a great tendency to diseases of the liver, and the liver is the main point of attack for diseases of acclimatisation. To investigate the particular kind of disorders induced by acclimatisation in individual organs is, Professor Virchow said, a paramount duty imposed upon German science. It does not depend upon special examples, but on the scientific determination of the conditions of existence for the vulnerable race of emigrants.

THE LEICESTER CRAZE.

THE *Vaccination Inquirer* is doing its best to convince the deluded people of Leicester that they are posing as the wise people of the nineteenth century in rejecting vaccination. It will be a small consolation to a Leicester working man who may lose two or three children in honour of his non-vaccination craze, as a poor man did in the East of London a few months ago, that they escaped the inconvenience of a sore arm for a few days and the infinitesimal risk of the introduction of other diseases—a risk so remote that many old practitioners have never seen it. All the fanaticism in the world—to say nothing of Leicester—will not dispose of the hard facts of the case, which are that small-pox finds out unvaccinated people; that it interrupts their work for two or three months; that it blinds them, disfigures them, kills them; that one good vaccination reduces liability to small-pox and its horrible effects, and that two good vaccinations make the immunity complete, so that one may live among small-pox in its filthiest forms, as the small-pox nurses do, for fifty years with impunity. The conduct of anti-vaccinationists is like that of men carrying on an oil business and neglecting precautions against fire, or that of sailors doomed to proceed to sea in a shaky ship refusing to take life-belts and denouncing the art of swimming. We will make one admission to the anti-vaccinationists of Leicester. We have something to learn from them of the use of sanitary police precautions, involving greater interference perhaps with personal freedom than the vaccination laws do, but still of great use. There have been epidemics in London that might have been greatly curtailed in their proportions if some of our health officers had had the faith in their powers and the personal enthusiasm of the enemies of vaccination in Leicester. But this does not make a man a bit the wiser who leaves his child unvaccinated and himself unrevaccinated.

CRUELTY AND VIVISECTION.

THAT the wanton, useless, or careless infliction of pain is cruelty everyone will admit. Such needless pain is nevertheless one of the commonest of life's evils. But even if we do not thus strictly define cruelty, but adopt the usual rendering of the word as implying wilful ill-usage, we have still no difficulty in assuring ourselves of its general application. Many every-day practices deserve the term. From childhood to old age examples occur in human conduct by no means as extreme cases, but even as part of its usual history, the stronger at school or in business oppressing the weaker and ill-treating him in his own selfish interest. Cruelty, again, is part of the inconsistency of "noble" sport. Battues, pigeon-shootings, tame stag-hunting, and other instances need hardly be cited. Illustrations, indeed, are legion, many of them little heeded by benevolent societies. It is no wonder that people not overcharged with sentiment are loud in denouncing cruel practices in general, and such as they have witnessed in particular. We need not, therefore, be surprised that vivisection for scientific purposes, because it looks cruel, has been condemned as really and unpardonably so by many persons. It certainly cannot be blamed while the customs we have referred to remain uncondemned. Let it not be thought, however, that we rely upon any such comparison to justify the pain reluctantly caused by scientific experimenters. To excuse it, if that were necessary, by seeking for it the same moral standing as a wanton amusement would be to shield it with its weakest defence. The position which vivisection occupies is altogether different. The very deliberation which appears in it, and which has largely helped to direct unthinking opinion against it, is really the mark of a purpose and necessity which must, in every thoughtful mind, distinguish it from wilful or heedless cruelty. Humanitarians, who think they cannot speak too harshly of its practice, would do well to note what is implied in that lordship over the lower animals which has been allowed to man by their common Creator. Not only may he use them for service as well as care for their wants; he may as freely use them as food, may take their life to sustain his own. To do this would, of course, be cruel were it not that reason and custom agree to advise it. In practising vivisection man acts on a strictly similar principle—that is, he uses the suffering of animals to relieve that of his own race, as well as that of theirs, and to avert the death of many by disease. This we consider to be clearly a part of his lawful authority, to be exercised, but not wantonly.

HABITS AND DISEASES OF THE ABORIGINES OF SOUTH FORMOSA.

IN some notes on the aborigines of South Formosa by Dr. W. W. Myers, published in the medical reports of the Chinese Customs Department, we read that amongst the Amis, an aboriginal tribe, in parturition the women sit down, and those confined with a first child or in difficult cases have the assistance of other women. In subsequent labours they generally do all that is necessary themselves. Cases of severe labour or dying in childbirth are rare. The umbilical cord is severed with a sharp bamboo and tied. The child when born is immediately thrown into a tub of cold water, and then taken out and wiped dry. This is continued daily for about a fortnight; afterwards it is taken every morning to the nearest river or sea-beach by its father, thrown into the water, and allowed to struggle for some time. This treatment is pursued both in summer and winter until the child is able to walk into the water itself. They say children can swim a long time before they can walk. A woman does no work and does not return to cohabitation till two months after childbirth. At Pilam syphilis is called "ba-long-gong," and is supposed to be communicated in the first instance by an evil spirit or incubus. At South Cape syphilis is rare, has no name, and no information as to its source can be obtained. When an Ami woman wishes to express scorn and contempt, she expresses her sentiments by uncovering her person. Small-pox in latter years has been very prevalent among the Amis, and when a village is infected all the people fly to the mountains. Many Chinese impostors go among them professing to vaccinate, and the Chinese Government have sent some people to perform inoculation. The savages say that small-pox was introduced by the Japanese on the occasion of their last landing, and that before that date it was not known in the South of Formosa. These people never smoke opium; they drink

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cold water freely, and bathe in cold water summer and winter. Both men and women go about in their own villages in warm weather quite naked. The neighbouring Paiwan tribe is said to have sprung from a rock, which opened, and two beings, male and female, burst out. They are strict monogamists and very virtuous, women holding an honoured place in their councils. Small-pox makes great ravages among them; and arrack, the art of making which has been taught them by the Chinese, is fast debasing them.

POISONING BY THE BERRIES OF THE BLACK ALDER.

DR. O. PETERSEN writes to the *St. Petersb. Med. Woch.* warning the profession against the popular idea of the entire harmlessness of all parts of the black alder (Rhamnus frangula), the bark of which is largely used both by medical men and the laity as an aperient. Dr. Petersen was sent for recently to a village near Streina, to see a boy eleven years of age, who five or six hours previously had eaten a quantity of the berries of this tree. He had first complained of headache and vertigo, and then had completely lost consciousness, and when the doctor arrived was suffering from such severe clonic spasms that it required three persons to hold him. The pupils were dilated, equal, and sensitive to light; the pulse was rapid, small, and scarcely perceptible; and the respirations could hardly be detected. A little wine was rejected. Cold affusion was applied to the head, and after this the pulse improved, the respirations became stronger, and the muscular contractions less frequent. Enemata were then given, but on account of the paralysed condition of the intestine they were retained, the sphincter not having lost its contractility. The cold douches were repeated every ten minutes, and ether given internally. In about three-quarters of an hour consciousness returned, and a copious stool was passed containing numerous portions of the berries and bits of their stones. By means of warm water draughts and ipecacuanha emesis was produced, and a quantity of berries brought up. After this the patient recovered rapidly, and slept well at night. The next day he complained of pain in the epigastrium, and presented a furred tongue, with all the symptoms of acute gastric catarrh. In a few days, however, he was as well as ever. The poison (prussic acid) evidently is confined to the stones of the fruit, many of which the boy had cracked.

BIOLOGY IN THE MEDICAL CURRICULUM.

IN opening the new biological laboratory in the University College of North Wales, Professor Michael Foster made some well-timed observations on the true place of biology in medical education. Physiology, he truly said, formed the key of the position in medicine. It dealt with the natural action of processes whose perverted state was embraced by the term pathology. While thus related on the one hand with actual disease and its treatment, it required for the complete and ready mastery of its details some knowledge of the forms and functions which are treated of in biological science. There is a tendency in our day to make rather too little of botany and zoology in the studies of the medical curriculum, and to give, perhaps, undue prominence to physics. The need of acquiring within a limited time a knowledge of many subjects and a deep and practical acquaintance with those which are specially professional renders it difficult to allot to the introductory studies their due share of attention. It should be possible, nevertheless, to allow to each of the sciences we have named a separate entity. They would thus receive a measure of justice proportionate to their bearing on other subjects, which could hardly be expected if they were mere adjuncts of anatomy and materia medica on the one hand, or of chemistry on the other. The formation of a laboratory for biological study is a feature of note in the new College of Wales. It is an earnest that practice is not to be forgotten in theory, and will, we hope, serve as an example in the formation of the other scientific and medical classes.

PRESENTATION TO MR. T. HOLMES.

THE divisional surgeons of the Metropolitan Police on Wednesday last presented Mr. T. Holmes, at his residence, 18, Great Cumberland-place, with a silver salver and coffee service, on his retirement from the post of chief surgeon to the Metropolitan Police, as a mark of their esteem and of their appreciation of his courtesy, kindness, and loyalty to them during his twenty years of office. The presentation was made by Mr. Bond, treasurer to the fund, accompanied by Mr. Simmonds, the secretary, and a deputation of between thirty and forty divisional surgeons. Mr. Holmes, in a speech thanking them for their handsome present, dwelt on the gratification it afforded him to receive such a mark of their regard, and assured them that no body of men could be better attended medically than are the men of the Metropolitan Police, and that he always found the divisional surgeons did their duty well.

EXPERIMENTAL YELLOW FEVER.

DR. CARLOS FINLAY, of Habana, has published the results of several experiments he has made on the inoculability of yellow fever. He performed the operation, or rather got it performed for him by mosquitos, which he caused first to sting a patient suffering from yellow fever and shortly afterwards a healthy person who was to be (with his own consent of course) the subject of the experiment. He found that the disease was only inoculable from the third to the sixth day. When two mosquitos were employed, so that a double dose was given, the symptoms of the experimental disease were somewhat more severe than when only a single mosquito was used. Of eleven cases of inoculation, six were efficacious, one doubtful, and four negative. The period of incubation varied from five to fourteen days; the symptoms consisted of headache, pyrexia, injection, with sometimes an icteric tint of the conjunctiva, and in some cases albuminuria. The fever lasted, as in the ordinary form, from five to twenty-one days. The author believes that this method of producing artificial yellow fever will ultimately be found very valuable as a prophylactic against the natural and dangerous form of the disease.

CONSANGUINEOUS MARRIAGES.

AN attempt has been made by Dr. Withington of Roxbury, Mass., U.S.A., to explain away the results of consanguineous marriages on the offspring. The paper is published in the Transactions of the Massachusetts Medical Society, vol. xiii., No. 4, 1885. Dr. Withington has tabulated 108 cases of consanguineous marriage collected from various sources. In 86 instances the relationship was that of first cousins. He has classed as healthy only those individuals who appeared to be free from any congenital defect or disease, and who had an average degree of intelligence and physical strength. He finds that 312 children out of a total of 413, the direct offspring of consanguineous marriages, were healthy. Of the unhealthy portion, 12 were deaf-mutes, 13 idiots, 7 insane, 15 died of consumption, 16 died in infancy, 8 were of deficient intelligence, and there were such defects as myopia, blindness, &c., in others. Only one case of polydactylism was observed. There was an average of five children per marriage. After carefully reviewing the evidence, Dr. Withington asks, "Do

these facts warrant us in supposing that there is a specific degenerative tendency due to consanguinity? Is it not possible to account by the ordinary laws of morbid inheritance for such untoward results as sometimes follow the marriages of kindred?" It may be objected that the children of blood relations are sometimes diseased when the parents themselves seem to be healthy. In answer to this it is urged that a casual observer might say that the parents were sound when such was not the case. Atavism may also account for cases of disease amongst the offspring of healthy though related persons. Retinitis pigmentosa and deaf-mutism are believed by many authorities to be always due to consanguinity, but this appears to be doubtful in the face of fresh evidence.

TOXIC PRODUCTS OF PURE CULTIVATIONS OF THE COMMA BACILLUS.

In a communication to the Académie des Sciences last year, MM. Nicati and Rietsch proved that cultivations of the comma bacillus produced toxic effects when injected into the veins. In the first series of experiments, vomiting, diarrhœa, and general depression were observed, with complete restoration to health at the end of an hour. The symptoms observed in the second series of experiments were altered rhythm of respiration, repeated vomiting, disorders of mobility, with preservation of all forms of sensation. One of the dogs died at the end of twelve hours, and the autopsy revealed ecchymoses in the duodenum and stomach; the renal cortices were strongly injected, and the bladder was empty. Recently (*Journal de Pharmacie et de Chemie*, October 1st) they have separated a liquid by Stas's method, and made experiments therewith. When some of this liquid, obtained from a four weeks' cultivation, was injected under the skin of a guinea-pig the following symptoms were observed: In a few minutes weakness of the hind limbs, spasmodic contractions of the diaphragm, frequent motions, later convulsions of the limbs (especially of the hind ones), salivation, and return to health at the end of fifty minutes, with the exception of paresis of the hind limbs, which lasted five or even twenty-four hours. Other experiments were made with cultivations that were prevented from developing so rapidly. Somewhat similar symptoms, even resulting in death, were observed, and the autopsy showed no signs of enteritis. These observers conclude from the above experiments that in pure cultures of the comma bacillus a toxic substance may be extracted by the method used for separating alkaloids.

ATROPHIC PROGRESSIVE MYOPATHY.

THE nature of progressive muscular atrophy of infants has usually been regarded as the same as that of the adult. But Duchenne observed that the muscular atrophy of infancy began in the face, and therein differed markedly from the adult malady. MM. Landouzy and Déjerine, two well-known French neurologists, now maintain the distinctive nature of the infantile affection. They do not regard it as a simple variety of the classic muscular atrophy, but assert dogmatically that the central nervous system shows no signs of disease. It is important to insist on the frequency with which hereditary antecedents may be obtained in the infantile disease; it runs in families, as Duchenne fully showed. The heredity may be direct or collateral. Most often the affection commences during the second infancy, but it may be delayed till adult age, or even till old age. It starts in the facial muscles usually, and but rarely in the upper limb. The atrophy of the facial muscles is visible as a deformity in the mouth, the lower lip falling, and both lips looking fuller than natural. Sometimes the orbicularis palpebrarum is so wasted as to cause genuine lagophthalmia. The masticators, the ocular muscles, the tongue, pharynx, and soft palate, are always respected by the disease. At the end of a certain time the atrophy appears in other muscles of the body, and is gradually generalised. The wasting is never rapid, but always insidious, and there are no pains or paralytic troubles. It not unfrequently invades the following muscles: trapezius, rhomboidei, deltoid biceps, triceps, long supinator, and the pectorals. The atrophy invades homologous muscles, and is symmetrical. The lower limbs are affected later, and the sacro-lumbar masses also. A negative symptom of much importance is the *absence* of fibrillary contractions in the muscles; another is the absence of false hypertrophy; and a third is the preservation of the voluntary contraction with the absence of the reaction of degeneration. Erb's juvenile form of progressive muscular atrophy closely simulates that described as a myopathy by MM. Landouzy and Déjerine, but the facial muscles are not affected, and there is some false hypertrophy, though there are no fibrillar contractions and no reaction of degeneration. The most important fact is the absence of changes in the central nervous system.

MEDICAL SOCIETY OF LONDON.

THE Lettsomian Lectures will be delivered on Jan. 4th and 18th and Feb. 1st in the ensuing year by Mr. Jonathan Hutchinson, the subject being: "On some moot points in the Natural History of Syphilis." The annual Oration will be delivered on May 3rd by Dr. R. Douglas Powell. The subject of the Essay for the Fothergillian Gold Medal to be awarded in March, 1886, is "The Nature of the Fevers usually termed in this country Febricula, Simple, Continued, and Modified Typhoid"; for that to be awarded in the following year, "On the Methods and Results of Operative Treatment in Malignant Disease." Essays are to be sent to the Registrar, at the Society's House, on or before the 1st of November next preceding.

LEPROSY IN CHINA.

DR. C. H. JOHANSEN, in his report on the health of Tamsui and Kelung, says that the most interesting disease among the Chinese population in Tamsui is leprosy; it attacks about one per cent. of the population. During the four years he has been in Tamsui he has seen 150 cases. The acute form commences with a fit of ague (temperature 105° to 106°); remissions begin in about eight days, and the fever subsides gradually. During the fit of ague red patches appear on the face and extremities, looking like urticaria. They do not itch, but are hot and tender, often exuding lymph or pus; generally destruction of skin occurs, and extensive ulcerations form, which heal in a fortnight, leaving an anæsthetic cicatrix. The disease is not contagious, either in the acute or in the chronic form. Syphilis cannot be the cause of leprosy, for Dr. Johansen has seen cases in which syphilis was acquired by patients under treatment for leprosy. Chinese doctors consider the disease to be the consequence of drinking rice spirit, but the only reason for this idea seems to be the similarity of the red swollen face of a drunkard to that of a leper. Not one of the writer's cases could be definitely classed as belonging to the forms mentioned in text-books. After the disease has lasted some months, all cases present dark-red spots on the face, the ears being shapeless and insensitive. As the disease advances these spots in the face increase in size, and the subcutaneous tissue develops great masses of small tumours, which produce the well-known hideous leonine appearance, or else the spots disappear, leaving white anæsthetic patches. The fingers are often very dark and clubbed. Generally some portion of a limb is lost through destruction of a joint. There is a deep ulcer, which shows no tendency to granulate, under the ball of the

foot or the heel, and the arms and legs have lost sensibility to touch and pain as far up as the elbow and knee. Dr. Johansen strongly recommends chaulmugra oil, made up into pills, each containing five grains. Three of these are taken daily after meals for about six months. An improvement generally takes place in a month. In some cases it was quite surprising to see the spots gradually getting paler and disappear, or sensibility returning to parts which had been anæsthetic for years. It was very difficult to get the indolent ulcers on the soles to heal up, as the Chinese neglect their wounds, and will not refrain from walking.

BULLYING AT KING'S COLLEGE.

THE question of discipline at King's College has again been made prominent. It involves the same question at every public school in England, whether public day schools, such as King's College, or any of the larger public schools of the higher grade. The higher grade public schools are more concerned in this question than the lower grade board schools, for the latter are subject to a more minute scrutiny and supervision by others than those concerned in the education and daily discipline of the scholars. We cannot suppose that King's College is more open to question, with respect to the amount of bullying, or, what is the equivalent of this, the absence of discipline, than other schools of the same order. Nevertheless, suspicion has been raised with respect to King's College, both in the past and in the present. It must not be forgotten that discipline at a public school has to be established with a view to curbing the unruly minority, rather than the well-ordered majority of scholars, just as the laws of a country have to be maintained for keeping in check the unscrupulous and reprobate. The skill of a master as a disciplinarian is better exemplified in the subjugation of the few unruly pupils of his class than in the good order and scholarship of the many.

MALARIAL AND RHEUMATIC THYROIDITIS.

THE physiological importance that has of late been attached to the thyroid body renders all its diseases interesting. M. Zesas has recorded a case of inflammation of this organ which occurred apparently as the result of malarial influence. The patient, a man aged twenty-six, had suffered for a year from intermittent fever. He suddenly felt a severe pain in the region of the thyroid body, and inflammation of this organ rapidly ensued. Whilst in bed with this affection an attack of ague supervened and the inflammation of the thyroid exacerbated. When M. Zesas saw the patient there was great dyspnœa and also dysphagia. Under the influence of treatment by sulphate of quinine the disease rapidly subsided. Several authors have described acute inflammation of the thyroid supervening in rheumatic fever; it may complicate the developed disease or follow it. In two observations of M. Raymond's salicylate of soda exercised a curative effect. Suppurative inflammations of the thyroid body have been met with by Laure in puerperal fever, and by Veil and Raymond in typhoid fever.

DENTAL EROSION IN SCROFULA.

M. EYSSANTIER does not regard dental erosions as due to any specific malady. In this regard he differs from M. Parrot, who taught that syphilis was operative, and from M. Magitot, who considers that infantile convulsions are causative. M. Eyssantier thinks that dental erosions are due to a general innutrition of the organism, which may be brought about by any means, such as scrofula. Scrofula is most active in altering the teeth during the period of second dentition. According to Eyssantier, erosion in furrows of the premolars and molars is most characteristic of scrofula.

SUCCESSFUL NEURORAPHY.

DR. DI FEDE reported to the Royal Medical Academy of Rome (May 24th last) the case of a lieutenant in a cavalry regiment, who had paralysis of the right forearm, in consequence of a sword wound received in a duel. The cutaneous sensibility on the outer part of the wasted forearm was much impaired; so it was on the dorsum of the hand and of the first three fingers; and there was complete loss of power in the hand. Two months and a half after the injury, Dr. di Fede cut down upon the divided radial nerve, revivified the extremities, and united them with two fine catgut sutures. Sensibility returned the fourth day, but mobility only a month after the operation. Under the alternate use of the induced and constant current the limb regained shape and power, so that the patient could write and do sword exercises with the injured limb. With the closed fist, extension and supination were perfect; but the movements of extension of the fingers and abduction of the thumb were not so complete. The patient was presented to the Academy, and the case is said to be the first of nerve suture practised in Italy.

THE POLLUTION OF THE RIVER LEA.

THE Association for the Preservation of the Lea has presented a memorial to the Metropolitan Board of Works, which makes a definite proposal for lessening the nuisance which is created by the present condition of the river. The proposal is that the Tottenham effluent should be connected with the Spring Hill sewer belonging to the Hackney Board, which joins the Metropolitan Board sewer system in the neighbourhood of Old Ford. The Spring Hill sewer would not be equal to carrying off the effluent at times when the rainfall is heavy, but during the summer it might be trusted to prevent, at any rate, this source of pollution from entering the river. Whether the Metropolitan Board will consent, or whether it will feel bound to refuse on the ground that it has already refused similar applications from other extra metropolitan districts, remains to be seen; but its consent would undoubtedly remove a serious danger to the health of London, although at the best it must be regarded as only a temporary expedient.

REGULAR INTERMITTENT ALBUMINURIA.

THE subject of this curious observation of regular intermittent albuminuria was a vigorous man who had suffered from malaria, and had considerable enlargement of the spleen. Examination of the urine having given contradictory results, Falkenheim investigated the case carefully, and found that the albuminuria was always associated with the recumbent posture; and further, it was observed that the mode of decubitus influenced the phenomenon. If the patient slept on his back, right side, or abdomen, only traces of albumen were found in the urine. If, however, the decubitus was left-sided, large quantities of albumen were detected in the urine. It appeared probable that the splenic tumour was the cause of these fluctuations through its varying influence on the renal veins, sometimes compressing them and at others leaving them free.

A NEW SPIRILLUM.

AT the last meeting of the Medical and Physical Society of Bombay, held September 4th, the President, Dr. H. V. Carter, showed specimens of a new spirillum (or spirochæta) which he had found in the blood of an Indian rat. The organism is minute, yet of characteristic aspect and activity so far as yet learnt; its occurrence in the blood does not produce recurring pyrexia or other peculiar symptom.

THE TREATMENT OF OBESITY.

STARVATION, semi-starvation, surcharging, "banting," alkalies, purgatives, Turkish baths, exercise, and the thousand and one ways of reducing corpulency to respectable dimensions, still leave a large section of our stout population in despair. M. Germain Sée comes to the rescue and solves (?) the difficulty with his accustomed dash and skill. "Oh, ye massive fat ones desiring to be made lean, eat not much meat, but drink enormously of tea." That is M. Sée's good news put in a nutshell. That is the cry now to be heard in the Parisian wilderness of fat. Obese individuals may suffer from shortness of breath from many causes, writes M. Sée, and infiltration of the muscles with fat is an important one. There are many ways of reducing the fat. The first is by diet; the second by moderating the imbibition of fluid; the third by muscular exercise; and there are also balneotherapy or bathing, and treatment by medicaments. M. Sée does not approve of "banting," as it takes too long; and, further, he argues that proteids such as meat, eggs, &c., are productive of fat. Ebstein has recently advocated "banting" combined with some fatty food; but our author does not fall in with this method. Stout people do not bear bleeding well, although this was the treatment in vogue in the sixteenth and seventeenth centuries. Iodides, alkalies, and diuretics are not well borne by fat persons. Moreover, these medicines, when they reduce obesity, do so by destroying, or at least damaging, the organs on which the nutrition of the body depends.

EXETER HALL AND YOUNG MEN.

THE educational handbook and general prospectus of the Young Men's Christian Association, Exeter Hall, contains information about everything that is creditable and likely to be helpful to young men, including matriculation and other examinations, as well as legal, medical, and civil service examinations, having reference to classes in all branches of useful knowledge, from physiology and languages to gymnastics and cookery. Exeter Hall, the Hall of Shaftesbury and of the descendants of Wilberforce and Clarkson, reasserts its determination to work for men in "fresh woods and pastures new." We advise all young men to join for their own sakes and for the good they can do to others.

AN EPIDEMIC OF STABBING CASES.

DURING the hearing of a charge of stabbing preferred against a woman at the Liverpool Police-court on the 6th inst., the stipendiary magistrate, Mr. Raffles, remarked that he could not understand how it was that people would persist in using the knife. Nothing could be more dangerous, for murder might be committed before a person was aware of it. Dr. Moore of the North Dispensary, who was the medical witness, stated that on the previous Saturday night there were attended to at the dispensary fourteen cases of stabbing with knives.

OVERCROWDING IN RUSSIAN MEDICAL SCHOOLS.

IN consequence of the number of young men who wish to become medical students in the University of Kieff and the limited capacity of the Faculty for giving instruction in practical subjects, the director of education there has ordered that only such students are to be admitted as have received their certificate of gymnasial maturity from a school in the Kieff district. All others, even gold medalists, are to be refused admission. The Dorpat and other Russian medical schools are also overcrowded and almost besieged by students, so that complaints are made that the quality of the instruction given is suffering.

THE CONGRESS IN AMERICA.

THE latest advices from America state that resignations from the International Medical Congress still continue. Among the most recent are those of Dr. J. C. Dalton, nominated president of the section of Physiology, Professor Gilman of the Johns Hopkins University, Dr. Sabine, Dr. Markoe, Dr. Loring, Dr. Fletcher Ingalls, Dr. Maury, and Dr. Thomas F. Rochester.

A SUB-COMMITTEE of the National Indian Association has, we understand, decided upon a scheme the object of which is "to afford counsel and assistance to Indian students coming to England, and to provide for them a system of friendly supervision under which, it is believed, many evils to which they are at present exposed may be avoided, and many advantages placed within their reach." This object, we are sure, will obtain wide sympathy amongst members of the medical as of other professions.

DR. NICOL MARTIN of Glendale, Justice of the Peace for Inverness, died last week at the ripe age of eighty-five. He was a descendant of an old Highland family, and gave evidence in the Crofters' Commission at Dunvegan. As a proof of his disinterested benevolence, it is stated that he spent upwards of £10,000 from his own purse in giving work to his poor neighbours in draining and trenching boggy land.

MR. W. MICHELL CLARKE, M.R.C.S., whose death occurred a few days since, had practised in Clifton for thirty years, and was at the time of his death consulting surgeon to the Bristol General Infirmary, having been formerly lecturer on forensic medicine at the medical school. He had a large practice, and his loss will be widely felt.

THE Lectures to be delivered in the Gresham College, Basinghall-street, on October 13th, 14th, 15th, and 16th, by Dr. E. Symes Thompson, will be on the subject of Diseases of the Heart.

THE question of powers being obtained by the Royal Colleges of Physicians and Surgeons to confer the degree of M.D. upon their licentiates and members will be discussed at the meeting of the College of Physicians on the 16th inst.

DR. J. B. HAMILTON, who was appointed Surgeon-General of the Marine Hospital Service of the United States in 1879, has tendered his resignation of the office, but remains in the service with the rank of Surgeon.

DR. MANUEL CARCÉLES SABATER of Madrid has successfully performed hystero-ovariotomy in a case of multiple myomatous and fibro-cellular tumours, numbering altogether seventeen, and weighing about ten pounds.

THE American Public Health Association is to hold its annual meeting in Washington on Dec. 8th next. Dr. Smith Townshend is the chairman, and Dr. J. C. McGinn secretary.

THE deaths are announced of Professor Haeser of Breslau, in his seventy-third year, and Professor Baeckman of Warsaw.

THE Professorship of Physiology in Kasan has been filled by the appointment of Dr. Voroshiloff.

DR. S. GUTTMANN has succeeded the late T. Boerner in the editorship of the *Deutsche Medizinische Wochenschrift*.

"CIRCULAR HOSPITAL WARDS."

BY HENRY C. BURDETT.

No one who is really interested in the welfare of hospitals and kindred institutions, and who possesses the true scientific instinct, could allow himself to become the advocate of one particular system of construction, to the exclusion of all others, unless or until results proved to demonstration that finality had been reached, and that no further improvements or advantages could be secured. We have not arrived at this millennium, nor are we likely to reach it. All genuine workers must therefore desire a fair field and no favour to each form of hospital construction—rectangular, circular, hexagonal, octagonal, or any other. When, however, an architect in Mr. Snell's position, who has expended large sums of money in the production of magnificent volumes dealing with the construction of Poor-law infirmaries, workhouses, and hospitals, deliberately sets himself to denounce one novel form of hospital construction—to wit, the, circular,—and with this object evolves theories which he treats as facts, it seems desirable that his contentions should be critically examined in order that justice may be done. It is this feeling, coupled with the circumstance that Mr. Snell himself has invited my attention to the subject, which impels me to offer the following facts for the consideration of all who are interested in this important matter.

First, then, Mr. Snell commences with an erroneous statement, due no doubt to the fact that two reports on the design of the Antwerp Civil Hospital have been issued by the Council of Public Hygiene at Brussels, and that Mr. Snell seems only to have seen the first, which was dated October 22nd, 1875. In this report, after stating their reasons, the Council declare they cannot approve the plans as at present shown. Certain modifications were made in consequence, and the plans were referred back to the Council at Brussels, which approved them in a second report, dated November 30th, 1876. The Council declare that they "do not make the admission or rejection of the circular system a vital point; they recognise it is an innovation and an experiment, and they wait the result with all possible reserve." There is a material difference between doubting the success of an experiment, as the Council of Public Hygiene did in the case of the Antwerp Civil Hospital, and "strongly condemning the erection of circular wards," which Mr. Snell thought they had done. Both reports of the Council are in my possession, and can be seen by anyone.

Increased cost of buildings.—The Council of Public Hygiene at Brussels showed more discretion than Mr. Snell has done. They regarded the erection of circular hospital wards as an experiment; and being cautious men they declined to decide whether they would be a success or a failure until experience had shown by results in which way judgment ought to be pronounced. Mr. Snell, on the contrary, designs an imaginary ward to assist his own argument, and carries his imagination so far that he ignores the facts contained in his own book of the precise measurements of a circular ward containing from twenty to twenty-four beds, with a diameter of 61½ ft., or according to my measurement of 60 ft.; and bases his calculations upon a ward with a diameter of 65½ ft. (which latter would not contain so many even as twenty-two beds, according to Mr. Snell). This hypothetical ward has led Mr. Snell into many erroneous conclusions, which would have been avoided had he exercised an equal caution with the Brussels Council and confined himself to typical instances of the results to be met with in hospitals now complete and occupied, which contain circular and rectangular wards. He would then have seen that the position he takes up was untenable, because the result shows that the cost of erection and the cost of administration, to say nothing of the improved hygienic condition, are not in favour of the rectangular when compared with the circular ward. In order to show this, and to avoid controversy as to the figures, I will confine myself to the instances given and the figures quoted by Mr. Snell himself in his book, "Hospital Construction and Management." The annexed table shows at a glance what these results are. It will be seen that among recent hospitals only St. Thomas's and the Leeds Infirmary contain wards of the proportions which Mr. Snell seems to favour—proportions which, for administrative purposes, I make bold to say are inconveniently large and unworkable, besides being unnecessarily expensive. It will be seen, too, that no hospital of any importance in this country, designed within the last fifteen years, possesses any ward containing more than twenty-four patients, the average in the three instances—Glasgow, Edinburgh, and Norwich—taken from Mr. Snell's book being twenty-one patients to the largest wards.

With reference to cost, it must be stated that I personally ascertained £278 per bed, the cost of the Circular Hospital at Antwerp, includes outlay on buildings, fittings, heating apparatus, machinery, ventilation, and furniture. It also includes the cost of erecting the most complete and, on the whole, the largest and best baths I have seen, which are available for and are used by the public as well as by the patients; and also the erection of a laundry, where the linen of all the other hospitals and similar institutions under the communal administration of the town, is washed, as well as that of the hospital itself. In the case of St. Thomas's Hospital, the Leeds Infirmary, and the other hospitals mentioned, many of these items are not included; and, if a precise comparison could be instituted, I believe the cost per bed at Antwerp would be reduced to at least £250 all told. It will be observed therefore that on the question of cost, not only do we find that wards built upon the circular system are not "of necessity of more costly construction than if they were built upon the parallelogram principle," as Mr. Snell contends, but, as a matter of fact, the most complete and the largest circular hospital yet opened, the buildings of which cover the large area of 302 superficial feet per bed, has cost 150 per cent. less than St. Thomas's Hospital, and £20 per bed less than the Leeds General Infirmary. Yet St. Thomas's Hospital and the Leeds Infirmary are the modern hospitals given in Mr. Snell's last book containing wards of from twenty-eight to thirty-two beds on the parallelogram principle, which he advocates in his paper as being so much better and cheaper than the circular. Facts are, however, stubborn things, and Mr. Snell's estimate of £105,135 extra expenditure on buildings alone in a hospital with accommodation for 1000 patients must not be taken "as representing the luxury of the circular as opposed to the parallelogram principle," but exactly the opposite of that which Mr. Snell set himself to prove, and imagined would be the case.

TABLE SHOWING STATISTICS IN HOSPITAL CONSTRUCTION.

Opened.	Hospital.	Number of beds.	Number of patients in ward.	Wall space per bed.	Height of ward.	Per bed.		Cost of buildings, &c., per bed.
						Cubic feet.	Superficial area.	
				Feet.	Feet.		Feet.	£
1869	Leeds Infirmary	328	32	7½	19½	1850	240	298
1871	St. Thomas's	573	28	8	15	1886	126	700
1885	Antwerp Circular	400	24	9	17	2525	149	278
1874–81	Glasgow Western	388	18	7¾	15	1620	100	258
1879	Royal Edinburgh	586	21	9	13½	2150	149	477
1881–83	Norwich	218	24	11¾	14	1511	108	270

Increased cost of administration.—Mr. Snell maintains that the system of circular hospital wards must necessitate an enormously increased annual expenditure for nursing. To enable this view to be demonstrated, he lays it down as a first principle that it is "essential that every ward should have the constant presence of one head nurse in the daytime and of one nurse at night-time, and that these head and night nurses could each properly overlook forty patients as a maximum," which number he afterwards reduces to thirty-two. He further maintains that a nurse's duty is not to be constantly in her ward, because "it is undesirable that she should be breathing all day its more or less foul atmosphere" (how about the poor patients?), and that she should be assigned an adjoining room having a window, through which she could overlook the patients. It is true that Mr. Snell bases his contention upon the authority of a book, the date of which he gives as 1863, and, like Rip van Winkle, he may be unaware that a good many things have happened in the nursing world during the last twenty-two years. I find, for instance, that so long ago as December, 1881, the authorities at Guy's, at King's College, and at St. Thomas's Hospitals considered that it was necessary to have one head nurse or sister to twenty-five patients as a maximum, and that at St. Bartholomew's the maximum was twenty-three; but these institutions were not the most advanced in their views on this subject at that date, for at St. Mary's the maximum was twenty-one, and at St. George's and Westminster the maximum was only twenty patients to each head nurse or sister, besides the ordinary nurses and assistants. It will be seen therefore that before the circular system of hospital construction was an accomplished fact hospital authorities had decided for themselves, as a matter of experience, that twenty-two patients to each head nurse was, on an average, the maximum number which they could justify or permit, even in wards built upon the parallelogram principle. This being the case, not only does the £105,135 extra expenditure on buildings elude our grasp, but the £196,775 estimated capitalised increase for nursing vanishes also, when we come to practical considerations and practical experience. It is not therefore the circular system or any principle of hospital construction which makes nursing in these days expensive, but the requirements and the efficient care of the sick, no matter what may be the shape of the ward in which the patients may be located. No doubt this is the reason why those who had to decide upon the plans for the Royal Infirmary, Edinburgh, the Glasgow Western Infirmary, and the Norfolk and Norwich Hospital, rejected the earlier idea of wards with from twenty-eight to thirty-two beds adopted at St. Thomas's and the Leeds Infirmary, and selected those with an average of twenty-one beds, because they contained the maximum number of patients which experience proved each head nurse ought to have under her care. As to the contention that the nurse's place is not with her patients during the hours of duty but in an adjoining room, I emphatically assert that is an exploded notion of a bygone generation, which would be laughed to scorn by the experienced and efficient hospital worker nowadays.

General criticism.—Generally I would observe that as 24 ft. may be taken as the best width for a hospital ward on the parallelogram principle, so, in my opinion, may 60 ft. be taken as the maximum diameter of any circular ward. I am further of opinion that it is far better to have an abundance of superficial area, but to avoid an overplus of cubic feet per bed. In clinical hospitals floor space is essential, and here the circular has great advantage over the parallelogram principle. My experience teaches me that 12 ft., or at the outside 13 ft., is high enough for any parallelogram hospital ward, but in the case of a circular ward this altitude may be exceeded in the centre, because it is desirable that the ceiling should be domed.

Wall space.—I do not think there is anything of practical value in the contention that in circular wards it is fair to measure the wall space somewhere about the patient's waist, and not by his head. Undoubtedly it is of more importance to keep the heads of patients wider apart than their feet, and a difference of ten inches or a foot between the wall space at the head and at the foot of a given bed is immaterial hygienically. Administratively the arrangements of the beds at the Miller Memorial Hospital, Greenwich, and the reduction of the width of the bedsteads towards the feet, as at the Hampstead Hospital, prove practice to be capable of beating theory easily. Practically, then, there is nothing in the contention that nurses and doctors will be inconvenienced in a circular ward, owing to the beds being slightly nearer at the feet than at the head.

The central area.—As to locating the nurse's room in the centre of a circular ward, it must be remembered that at Antwerp the glass screen which encloses this space is only some 7 ft. high, that it contains nests of shelves in the centre, and that it is used to hold the dressings, medicines, bandages, and other ward necessaries, as well as to afford a place for the nurse to sit in when not engaged with the patients. I made several experiments at Antwerp; and I found that all but two of the twenty-four beds could be seen in each of the wards from any given spot. For my own part, I prefer the three central fireplaces, with extraction shafts and tables on either side, to be found at Greenwich, to the central staircase at Burnley, or the nurse's room at Antwerp. These are, however, details after all, and the special circumstances of the climate of particular countries will no doubt lead to very varied arrangements in this respect.

Wards of too large a size.—Anyone who reads the reports of the Council of Public Hygiene upon the Antwerp Civil Hospital will see that their fear was that wards of too large a size would be constructed. They point out, most wisely, that a great well or cube of air is not the best solution of the problem of ventilation. A moderate, though adequate, cubic space, and the rapid interchange of air—i.e., the evacuation of foul air as speedily as possible, and the supply of pure or fresh air in its place—are the first considerations to be desired in any system of ventilation. I spent some hours at Antwerp, and I thoroughly tested the ventilation and saw it in operation, as it may be seen by any visitor. For simplicity and efficiency it certainly surpasses anything that I have ever seen, and its efficiency is placed beyond doubt by the knowledge that the administration of the Antwerp Hospital, according to English ideas, is not good.

Sun and air.—Mr. Snell appears to contend that cross windows are sufficient for all purposes of ventilation in hospital wards, and that the sun's rays will provide the necessary warmth. At least, I imagine this from the fact that no other provision appears to be made in the plans he has published with his paper. Assuming for a moment that we possess a sufficiently genial climate in England to adopt this simple system, for practical purposes the efficient ventilation of hospital wards throughout the world cannot be secured except by artificial means. In other words, half the diameter of a circular ward, or a maximum of 30 ft., reduced in practice to some 26 ft. by the appliances placed in the centre of the ward, is the limit of space through which air and sun would have to penetrate in the case of a circular ward. Now, as the circular form admits the entrance of all the air and sun available at a given moment at every point of the compass, I venture to think that, to say the least, this principle of construction has here some advantage over that of the parallelogram.

Theories.—I might theorise after Mr. Snell's model and show that, given two wards, one circular and the other rectangular, each for twenty beds, the floor space, the wall space, and cubic space in each being equal, the wards will then be of the following dimensions:—

Circular.		Rectangular.
Diameter	60·3 feet	Length ... ... 90·0 feet.
Circumference ...	189·0 ,, ...	Breadth ... ... 31·3 ,,
Area per bed	142·6 ,, ...	Area per bed ... ... 142·6 ,,
Cubic space per bed	1852·6 ,, ...	Cubic space per bed 1852·6 ,,

Height in each case 13·0 feet.

Now, in the circular ward the enclosing walls are 189·0 feet long, and in the rectangular ward they are 249·4 feet long. The windows and doors being the same in each case, it follows that the amount of brickwork and plastering will be greater in the rectangular than in the circular ward (the actual proportion being as 13 is to 10). Supposing the extra cost of brickwork and plastering in the circular ward to be as much as 25 per cent. (an excessive estimate), the balance of cost is still on the side of the rectangular ward.

I will not, however, pursue the subject further, for the sufficient reason that in this practical age theories are out of place, and experience, supported by practice, must be the sole guide for all who wish to do good work on sound principles.

A hospital to be seen.—Anyone interested in hospital construction or, indeed, in hospitals, and especially medical men and architects, ought to visit the Circular (Stuyvenberg)

Hospital, Antwerp. The journey *vid* Harwich is a very pleasant one, and the architects, Messrs. Belmeyer and Van Riel, will courteously give the fullest facilities for inspecting the buildings. I have visited many hundreds of hospitals, but I never spent a few hours more profitably than in Mr. Van Riel's company at the Civil Hospital, Antwerp.

The Lodge, Porchester-square, W.

ANTI-CHOLERAIC INOCULATION.

DR. LUIGI ROMANELLI, head physician to the Hospital Domenico Cotugno for Infectious Diseases, gave expression to the following opinions during a conference on anti-choleraic inoculations recently held in Naples:—

"Gentlemen,—I believe, and my judgment has its foundation on analogy with other infectious diseases, (1) that anti-choleraic inoculation contributes to the diffusion of cholera, the person inoculated becoming a means for the transmission of the disease to others, and the disease spreading in proportion to the number inoculated; (2) that the persons inoculated are exposed to the same dangers as those who contract the disease without having been inoculated, being liable to attacks of cholera in proportion to their special personal susceptibility, and in proportion to the quantity and intensity of the cholera poison. Similar results would obtain in those who without immediate inoculation might be exposed to the influence of a recurring epidemic of cholera. If it be urged that the mortality amongst those inoculated is small in comparison with that observed among sufferers contracting the disease without inoculation, I would reply that I attribute the difference to this circumstance only—namely, that the inoculated, conscious of their having to a certainty contracted the choleraic infection, adopt from the very first every curative means within their reach to overpower the malady; while those exposed only to the ordinary influences of an epidemic of cholera do not, in the earlier stages of the disease at least, adopt the necessary precautions, and often underrate the warning of the premonitory diarrhœa until the characteristic features of the graver disease have become established. This negligence, as I have often insisted on other occasions, contributes greatly to the development of a severe instead of a mild attack. So far as preservation by means of inoculation is concerned, I believe that its existence during the concurrent epidemic may be admitted, since, during this present one, I have never seen patients in hospital attacked with cholera for a second time, as I have observed in previous epidemics. So far as in me lies, I would obstruct the practice. Although those inoculated acquire a temporary immunity from the disease, they are not thereby the less subject to all the dangers attending those who contract cholera without inoculation, with this difference, however, that the inoculated are certain to contract the disease, while the non-inoculated may escape it. Finally, the advantage to which I referred as possessed by the inoculated, that from the first they become the subject of every necessary precaution, might also be secured by the non-inoculated if we could impress upon them the conviction that during times of choleraic visitation every derangement of the gastro-intestinal tract should be as carefully attended to as if the patient were actually suffering from an attack of cholera."

The above quoted opinion of Dr. Romanelli has elicited the following reply from Professor Rummo:—

"I have read an extract of a speech delivered by Dr. Romanelli, physician-in-chief to the Hospital Domenico Cotugno for Infectious Diseases, in which he expounds his opinion on anti-choleraic inoculation. Keeping in mind the Latin admonition, "Incivile est, &c.," I would have abstained from indicating the errors and contradictions manifest in the above extract, had I not had an opportunity of reading a full report of the conference at which Dr. Romanelli's speech was delivered. I am further induced to beg indulgence for the following observations, because of certain assertions made by Dr. Romanelli in a positive and didactic manner, while the salutary precautions employed with Dr. Ferrán's liquid under my charge—precautions which included even its protection in a secure place under lock and key—impose upon me the duty of not remaining silent, since I, who was specially charged by the Minister of Public Instruction to study in Spain the action of these choleraic inoculations, might erroneously be thought to give support by my silence to what really appear to me to be groundless assertions. Before all, I must confess myself not a little astonished to find Dr. Romanelli holding a conference at all on this subject, and still more at his passing so precise a judgment upon it, without apparently any experience either of the results or the process of anti-choleraic inoculation, and without regard to the reports of the various commissions delegated to Spain for the very purpose of studying them. Apprehensions are entertained that Dr. Ferrán's liquid could of itself engender an epidemic of cholera; but surely Dr. Romanelli, whom I can hardly suppose ignorant of the most recent bacteriological investigations, must be aware that experiments with this fluid are daily performed in Paris, Berlin, &c., without fear and without infectious results. As regards the inoculation itself, Dr. Romanelli appears to have two objections to raise. In the first place he believes, "per analogia," that anti-choleraic inoculation contributes towards the diffusion of cholera, and that the person who may have been submitted to this inoculation becomes, *ipso facto*, a means for the transmission of this disease. In the second place, he asserts that the dangers of diffusion of cholera must be in proportion to the number of inoculations. To give public expression to such opinions, and on so delicate a matter, appears to me to be an act of very questionable propriety, even if they possessed any support from ascertained facts; but still more must this be the case when they are directly contradicted by observation and utterly unsupported by experiment. My own numerous observations, indeed, lead me to the conclusion that inoculation with Dr. Ferrán's liquid is not only inoffensive to the individual, but no person so inoculated can in any way be the means for propagating the disease. And the practical demonstration thereof is this, that neither in the fæces, nor in the milk, nor in the exudations from the skin, nor in any of the bodily excretions and secretions, have bacilli or spirilli been observed. If, therefore, in the organism of the inoculated, these parasites, to which the cause of cholera is now generally attributed, are absent, how can their migration into other organisms be effected there to engender the disease? And not only so, but it has been further established, not only by myself but also by commissions not in any way partial to Dr. Ferrán, that the local effects of the operation of inoculation are almost *nil*, with the exception of a slight redness attended with a little congestion and pain, disappearing entirely after a few hours. There ordinarily remains no indication of any kind at the point where the inoculation was effected, just as is the case after hypodermic injections of non-irritant medicinal solutions. Very rarely have graver local phenomena been verified. Among a number of about 60,000 inoculations only a score or so of phlegmonous results are recorded, and in these cases due consideration must be allowed for the persons who perform the inoculations—not always *secundum artem*,—for the special conditions of the individual operated on, &c. And here I would ask, How many such phlegmonous results, abscesses, &c., would occur in an equal number of vaccinations or injections, say, of corrosive sublimate or bisulphate of quinine? Dr. Ferrán's operation produces general phenomena, which vary greatly with the organism and the constitution of those inoculated. Many suffer nothing but a little local pain; some only an unusual languor, or slight and evanescent elevation of temperature. In rare cases we note rigors with depressed temperature. I have never had occasion to observe gastro-enteric disorder of any gravity. Only in a small locality near Jativa was I informed by the local medical practitioners that the persons inoculated by them passed fæces strongly coloured with bile. There is, however, another observation which still more strongly contradicts Dr. Romanelli's affirmations. According to his theory, we ought to have seen the number of choleraic patients multiply in proportion with the number of inoculations. We have to record absolutely the reverse. No increase of cholera cases has been observed; and indeed, at Villanueva di Castellon, where 600 inoculations were performed, arrest of the epidemic coincided in point of time with the performance of these operations. I do not by any means affirm that such arrest was due to these inoculations; I only observe that there was no concurrent diffusion of the disease. The absence of any ability in Dr. Ferrán's operations to favour any such diffusion is attested, as I have already said, by the researches of all the commissions appointed to study the subject, and I have personally assured myself that no comma bacillus exists in the blood of the

inoculated. This parasite remains localised in the subcutaneous tissues at the site of the operation, and the phenomena which I have indicated are caused by ptomaines, and are not the result of invasion of the circulatory current by a microbe. Paul Gibier, noted for his hostility to Dr. Ferrán, and who worked in association with the celebrated micrologist, Ermengen, during his researches in Spain, has declared that he has not been able to discover the comma bacillus in the blood of those inoculated. Moreover, the French Commission, composed of Brouardel, Charrin, and Albaran, report as follows: 'Dans le sang des personnes vaccinées on ne découvre ni spirilles ni virgules. Dans les déjections il n'y a pas de bacilles-virgules. Nous avons pu reconnaître par nous même que les personnes inoculées ne présentaient pas le lendemain d'accidents généraux graves.' It is here specially noteworthy that the French commission was most hostile to Dr. Ferrán. To such an extent, indeed was this the case that they stigmatised him as a charlatan, a rogue, &c., and yet they have not been able to say that Dr. Ferrán's inoculations have diffused cholera. If it had been possible for them to prove that they had, or that such diffusion could have been in any way suspected, what prominence would they not have given to these conclusions in their report? Would they not have found in this the most serious, the most convincing pretext for denouncing Dr. Ferrán and proclaim their triumph? But again, the Spanish commission, nominated by the Government, and pointedly hostile to Dr. Ferrán, so far, indeed, as on several occasions to have prohibited his inoculations to proceed, the Academy of Medicine, and the Athenæum of Madrid, have all asserted that the inoculations are inoffensive. Analogy has led Dr. Romanelli into the assertion of an absurdity on another question, and that is when he attributes the partial immunity enjoyed by the inoculated over the non-inoculated to this—that the former, knowing for a certainty that they have contracted the choleraic infection, adopt, from the first, all the necessary curative means for overcoming the disease, while the latter disregard precautions of any kind, &c. Nothing can be more groundless. For a convincing answer, it is sufficient only to recall the enthusiasm of all Spaniards, no matter to what class belonging, for Dr. Ferrán and for his inoculations, and certainly such enthusiasm was not likely to arise from the certainty of the contraction of choleraic infection. Dr. Romanelli might well have said, instead, that it is the certainty of immunity by means of inoculation which contributes more than anything else to preserve them from the disease, since we know how necessary it is not to be despondent or low-spirited on such occasions, but to face the danger with courage and fortitude."

THE NAPLES WATERWORKS.

THE city of Naples, which was last year so severely visited by cholera, has, up to the present time, escaped the ravages of this year's epidemic. Considering the very low state of sanitation in that city, and the squalor and ignorance in which many of its inhabitants are sunken, it is not a little remarkable that it should have escaped a second visit from the scourge which has decimated some of the fairest provinces of Spain, and which now is making headway in the capital of Sicily. It is an ill wind that blows nobody good, and the sufferings of the Neapolitans last year had the effect of quickening the action of the town authorities, and stimulated them to hasten the completion of the waterworks which were formally opened by King Humbert in the spring. English readers will find it difficult not to believe that the immunity from cholera in Naples is due to the purity of its water-supply, and we feel that some information with regard to this great sanitary advance made by the Neapolitans will not be unacceptable to our readers.

The country immediately round Naples is poorly supplied with water, and the soil being for the most part of a porous nature, the rainfall soon disappears. The water-supply of the vast population congregated in the city has, therefore, from the earliest times, been a perplexing problem; and the remains of the great Claudian aqueduct, which are to be met with in the neighbourhood of Naples and round the shores of the Bay of Baia, testify to the great efforts which were necessary in early times to bring the first necessary of life within reach of the teeming populations of Campania. The new aqueduct, which was opened on May 10th, brings water to Naples from the neighbourhood of Avellino, a town which is at the foot of Mount Vergine, some twenty-eight miles to the east of Naples. The springs of Urciuoli, which are some 321 metres above sea level (more than 1000 feet), have, together with the Quercia Grande and Stefano, two tributaries of the river Sabato, been entrapped and regulated by engineering works of considerable magnitude, and made to feed a "collector," whence issues the great aqueduct for the supply of Naples. The aqueduct, which is carried by means of trenches, bridges, and tunnels, starting from Urciuoli, about thirty-two miles to the east of Naples and twenty beyond the eastern slopes of Mount Vesuvius, takes a direction northward for thirteen kilometres to the village of Prata; thence for thirty-two kilometres it runs westward, and a little north to Arpaia, where the altitude of the aqueduct above sea level is 288 metres; so that in the first forty-five kilometres of its length the aqueduct has a fall of thirty-three metres. At Arpaia there is a sudden fall of thirty-six metres, and thence it runs to Cancello, distant fifteen kilometres, at which point the height of the aqueduct is 245 metres above sea-level. At Cancello the water is forced into iron pipes, and descends to the reservoirs of distribution, of which the chief is at Capo di Monte, close to the gardens of the Royal palace. This serves for the low service and middle service, while the reservoir for the supply of the high parts of the town is among the hills to the west of Capo di Monte, and about two kilos in a direct line to the north of the Castle St. Elmo, the military fortress which dominates the city of Naples. The distribution throughout the city is by means of iron pipes, varying in diameter from about three feet to three inches, and, judging from the map which has been furnished with the *brochure* published by the water company, the pipes form a comparatively close network in the city, and supply even the poorest parts. The supply of water is said to equal about 170,000 cubic metres per diem, or nearly double that which is absolutely necessary; so that henceforth there ought to be no lack of water even in the driest seasons. When last we were at Naples some of the inhabitants were not quite clear as to the terms upon which the water was to be supplied to them by the company, and there were some fears lest the tariff should prove to be to some extent prohibitive. We trust that no shortsighted policy of this kind will interfere with the general use of the water by the inhabitants, and the municipality will have to bear in mind that the most economical course for them is to keep the city healthy at no matter what cost.

Naples has hitherto, and especially of late years, borne a most evil reputation, and tourists and visitors have always had to set the risks of an attack of typhoid against the charms and pleasures to be found in the district of which Naples is the centre. This liability to fever has been due, there can be no doubt, to the unwholesome water-supply, which was largely drawn from surface-wells sunk in the porous soil of a locality inhabited by a dense population, who live to a great extent in defiance of all sanitary rules. A city that is liable to typhoid will, it is supposed, certainly suffer from cholera when that disease is prevalent, and the sad experience of Naples in the summer of 1884 lends very strong support to this supposition. If the water-supply of the city become at once abundant and wholesome, the liability of the city to water-carried zymotics ought to vanish absolutely. It would be a great convenience to visitors if some sort of guarantee could be offered them that the hotel of their choice is really supplied with untainted water, and we would recommend to the Naples Water Company the advisability of imitating the fire insurance companies, and affixing to the hotels and other houses which they serve a metal plate indicative of the fact. Naples, with its unrivalled advantages in the shape of climate, aspect, and the unusual interest and beauty of its environs, ought to be the most popular winter city in Europe. This, we think, it is likely to become, and the municipal authorities, with the countenance of the King, are doing their best to make it so. The crowded parts of the town, especially near the port, are undergoing extensive alterations. A new corso (the Corso Vittorio Emmanuele) has been driven through the higher parts of the city from the Posilipo Hill to the Museum, and the means of transit by tramway between Pozzuoli on the one side and Resina on the other afford the potentiality of great convenience to visitors. We say "potentiality" rather than actuality, because many of these lines have been cheaply

laid, and a tramway journey through the city is at present a tedious and jolting process which is far from comfortable. The hotel accommodation is very good, and some of the newer establishments, such as the Grand (kept by a member of the Hauser family, the proprietors of the Schweizerhof at Lucerne and other equally well-known Swiss hotels) and the Hôtel Bristol on the Corso, are the equals of any hotel in Europe.

Visitors to Naples ought to be freed from the terrible importunities of touts of all kinds. The incessant pestering by cabmen, guides, pimps, and vendors of obscenities is a serious trial of patience and temper, and must have the effect of keeping visitors away. Reform in this direction would be wise on the part of the Town Council. Notwithstanding the improvement in the water-supply, the visitor to Naples must be careful if he would altogether avoid fever and gastric troubles. It is not safe, we think, to eat uncooked vegetables such as salad, and certainly it is not advisable to eat raw the very beautiful and tempting Naples oyster, which is fattened at the mouth of the town sewer close to Santa Lucia. It is quite possible that for a time the new waterworks will have the effect of increasing the smells of the foreshore, which are painfully noticeable after a shower. The sewers all run to the sea, and if these sewers are perpetually flushed, the sea round the foreshore will be perpetually foul. When, however, the scheme for turning the sewage of the town on to the land to the north-west of Posilipo has been carried out, Naples will be one of the pleasantest, and might become, as the sanitary knowledge of the people progresses, one of the healthiest, cities of the world.

CHOLERA IN SOUTHERN EUROPE.

CHOLERA continues to decline in Spain, but the diminution is slow, and the mortality is still heavy. During the past fortnight nearly 2000 cholera deaths have been recorded, and the daily mortality, which at the beginning of the fortnight varied from 200 to 250, has now fallen to but little over 100. The records as to individual towns and provinces are no longer issued, but a large number of deaths are stated to have taken place in the capital of Barcelona, where the disease continued to be very fatal up to the end of September. There has also been considerable fatality in the Spanish lines near Gibraltar; but since the commencement of the present month no cases have been heard of in the English lines, although some twelve cholera deaths had occurred there up to about the middle of September.

In France cholera remains practically limited to Marseilles and Toulon, and the number of deaths in each of those towns has so far diminished that the issue of a daily bulletin has been discontinued. But the disease is not at an end in either place, and enteric fever is also prevalent at Toulon. Indeed, the need for the adoption of sanitary measures on a wide scale in both these Mediterranean ports is made more and more obvious as time progresses.

In Italy, the island of Sicily remains the only portion of the kingdom where cholera prevails in an epidemic form, and the province of Palermo is still that part of the island which is principally affected. The daily deaths in the province are now some fifty in number. The cholera occurrences in other parts of Italy have, happily, shown no tendency to become diffused.

CONVERSAZIONES AND OLD STUDENTS' DINNERS.

ST. BARTHOLOMEW'S HOSPITAL.

THE past and present students of this Hospital held their annual dinner in the large hall, Dr. Matthews Duncan being in the chair. Amongst the distinguished guests were Dr. Burdon Sanderson and Sir J. Watt Reid, Director-General of the Navy Medical Department. A company numbering considerably over a hundred assembled on the occasion, and a most enjoyable evening was spent.

ST. GEORGE'S HOSPITAL.

The annual dinner of the St. George's Hospital Medical School took place at the Criterion Restaurant on October 1st. Mr. Rouse proved a most excellent president, and on him fell the greater share of the burdens and honours of the evening. The stewards are greatly to be congratulated on the excellence of the dinner and the wines. After the usual loyal toasts, Dr. Wadham responded in a humorous and enlivening speech to that of "The St. George's Hospital Medical School." Mr. Holmes, Surgeon-General Cornish, Mr. Cowell, Mr. Brudenell Carter, and Mr. Peel Davis were among the other speakers. Upwards of one hundred past and present pupils assembled, the former being, it was gratifying to notice, exceptionally numerous, including Sir Prescott Hewett, Bart., Dr. Myrtle of Harrogate, Mr. Read of Kensington, Mr. Page of Wimbledon, and many others.

GUY'S HOSPITAL.

As is usual, the medical session was ushered in by a conversazione, which was attended by rather over three thousand people. The medals and prizes were distributed to the successful students by the Treasurer at ten o'clock in the anatomical theatre, which was crowded with ladies and gentlemen interested in the prize-winners. In the course of his short speech, the Treasurer drew attention to the remarkable successes which Guy's has for some years past obtained at the various examining bodies. After a few remarks from Dr. Wilks, the company returned to that part of the hospital devoted to the conversazione, where the pretty and elaborate electric lighting of Messrs. Woodhouse and Rawson, and the very tasteful decorations of Messrs. Morris and Co., excited universal admiration. Some of the most interesting exhibits were the instruments adapted for applying the electric light to medical purposes, Mr. Wilson Swan kindly exhibiting some of his own inventions. The various collections of microscopical objects were particularly good, Messrs. Govan and Crook, students of the hospital, showing some very beautiful bacilli. Messrs. Tooth gave a very fine display of pictures. Messrs. Coote and Tinney entertained the company with an excellent musical performance.

The Anatomical, Comparative Anatomy, and Pathological Museums were lit with the electric light, and in the latter Dr. Goodhart showed all the pathological specimens added to the museum during the year. The grounds were illuminated in the same style as the Inventions Exhibition. The company seemed to enjoy themselves thoroughly, and did not separate until a late hour, each person carrying away as mementos a very tasty programme and a leaflet containing an account of the work of Guy's Medical School for the past year.

THE LONDON HOSPITAL.

At the London Hospital no sessional festivity has as yet been held, but we believe it to be intention of the staff to hold a dinner at the opening of the new nursing institution, which will, it is expected, take place in the course of a very few weeks. The institution is intended to accommodate about 100 nurses, some of whom, after having gone through the full course of instruction and without severing their connexion with the institution, will be available for private nursing.

ST. MARY'S HOSPITAL.

This year the occasion of the delivery of the introductory address was, for the first time, graced by the presence of ladies, a departure which seems to have found considerable favour, and which is likely to form a precedent for future anniversaries. In the evening the annual dinner was given at the Holborn Restaurant. It was attended by the hospital staff, by old and present students, and by a few distinguished visitors, in all 149, a greater number than at any previous festival. The usual toasts were interspersed with vocal and instrumental music, and the evening was wound up by two recitations superbly rendered by Mr. Terriss of the Lyceum Theatre.

On Friday, Oct. 2nd, a conversazione given by the medical officers and lecturers, was held in the hospital and new school buildings. The whole of the basement wards of the former were cleared for the purpose, and these, with the out-patient department, were handsomely draped and decorated. The bands of the Grenadier Guards and the St. George's Rifles were in attendance. In the board-room of the hospital the platform was alternately occupied by Mr. Clifford Harrison, who gave six recitations, and Mr. E. Plater's Glee Union. The out-patient waiting-room was fitted up as a Japanese hall, and the adjoining rooms were furnished in Oriental style. [Several other entertainments

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of popular and scientific interest were provided for the visitors, who numbered 4000. Altogether the spectacle was a most brilliant one, and reflected the highest credit upon the Dean and executive committee.

MIDDLESEX HOSPITAL MEDICAL SCHOOL.

The annual dinner of the above school was this year held at the Holborn Restaurant, under the presidency of Mr. J. Smith Turner. It was well attended by past students, some coming from far northern, western, and eastern counties, to do honour to the occasion and support their old friend. The principal toasts were proposed from the chair, and among the speakers were Sir Oscar Clayton, Mr. Francis Hoare (who replied to the toast of the Hospital), Mr. Lawson, and Dr. Fowler. The evening passed off most successfully, and this was in no little measure ensured by the excellent programme of music arranged by Mr. David Hepburn, and performed by himself and several amateur friends, with the valuable aid of Mr. Wilhelm Ganz.

ST. THOMAS'S HOSPITAL.

After the address, which was given by Mr. A. O. Mackellar at 3 P.M., those present visited the wards of the hospital and the school, where the recent alterations and improvements were much admired. In the evening the usual dinner of the old students was held in the Governors' Hall, Dr. Ord, Dean of the School, presiding. There was a large and most successful gathering, more than 120 being present. Sir Thomas Crawford, K.C.B., Dr. Dickson, Professor Buchanan, Dr. Mangles, Alderman Stone, treasurer of the hospital, and other guests were present.

UNIVERSITY COLLEGE.

The annual dinner of the old and present students of the Faculty of Medicine took place on the 1st inst. at the Freemasons' Tavern, under the presidency of Professor John Marshall, F.R.S. About 120 sat down to dinner, and, in addition to the members of the consulting and acting staff, many former students were present, including Dr. W. Wood, Dr. Burford Norman (Southsea), Mr. Bluett (Chesterfield), Mr. Rigden (Canterbury), Mr. Tweed, Mr. Humphreys (Shrewsbury), Dr. Henry Maudsley, Dr. T. H. Green (Charing-cross Hospital), Dr. Lewers (London Hospital), Mr. W. Gill, Mr. P. B. Mason (Burton-on-Trent), Dr. Barry Ball, Mr. W. Hickman, Dr. Snow (Bournemouth), Dr. Cooke, Dr. B. H. Allen (St. Leonards), Mr. Bond (Leicester), Mr. Hochee, Mr. Symonds (Oxford), Dr. C. Beevor, Mr. T. P. Gammon, Mr. Alford, Dr. Tyndale Watson, Dr. Hodson, Dr. Whittle (Brighton), Dr. May Miller, Dr. T. Colcott Fox, Mr. Shirley Deakin, Dr. Julian Evans, Mr. Swift, Mr. Hancocke Wathen (Clifton), Dr. Bond (Newcross), Mr. T. W. Thompson (Potter's Bar), Mr. Peter Cooper, Mr. H. F. Bailey, Dr. H. Walker, Mr. Buckston Browne, Mr. Heather Bigg, Mr. Stewart Norman, and others. The speeches were few, but in the hands of Mr. Marshall it is needless to say they were telling. Mr. Christopher Heath, who proposed a vote of thanks to the secretaries, was enthusiastically received on this his first public appearance after his late severe illness, from which, we are glad to say, his recovery seems to have been complete. Some excellent singing by Dr. F. T. Roberts, Dr. Beevor, and Mr. Campbell Williams, assisted by Mr. T. H. Mason, helped to enliven what proved to be a most enjoyable *réunion* of old friends. The guests were so arranged at table that men of the same year were in proximity to each other.

WESTMINSTER HOSPITAL.

After the introductory lecture on October 1st by Mr. George Cowell (an abstract of which was given in our issue of last week) and the distribution of prizes by Sir Rutherford Alcock, the string band of the Royal Artillery took possession of the large lecture theatre and played a charming selection of music. Refreshments were served in the dissecting room, which was tastefully decorated with plants, &c. There was a large attendance of the staff, students (past and present) and their friends, and satisfaction was universally expressed at the able manner in which the architect, Mr. S. Salter, had carried out the wishes of the lecturers. The Students' Club, accommodation for which is provided in the basement, was inaugurated at the same time; this promises to supply a great want. During the afternoon the Dean was able to announce that the entry of new students was already greater than at any previous period of the history of the school.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 5525 births and 3007 deaths were registered during the week ending Oct. 3rd. The annual death-rate in these towns, which had steadily declined in the preceding eight weeks from 21·8 to 15·9 per 1000, rose again last week to 17·6. During the thirteen weeks ending the 3rd inst. the death-rate in these towns averaged only 18·8 per 1000, which was 2·6 below the mean rate in the corresponding periods of the nine years 1876-84. The lowest rates in these towns last week were 12·3 in Bolton, 12·9 in Birkenhead, 13·5 in Halifax, and 13·6 in Nottingham. The rates in the other towns ranged upwards to 23·8 in Newcastle-upon-Tyne, 24·0 in Plymouth, 25·3 in Cardiff, and 26·0 in Oldham. The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had declined from 930 to 374 in the preceding eight weeks, further fell to 356 last week, and were fewer than in any previous week since February last; they included 136 from diarrhœa, 52 from whooping-cough, 49 from scarlet fever, 46 from measles, 41 from "fever" (principally enteric), 35 from diphtheria, and 7 from small-pox. No death from any of these diseases was recorded last week either in Halifax or in Huddersfield, whereas they caused the highest death-rates in Preston, Liverpool, and Salford. Diarrhœa caused the greatest mortality in Sunderland and Preston; "fever" in Norwich and Portsmouth; scarlet fever in Leicester; measles in Salford; and whooping-cough in Salford and Blackburn. Of the 35 deaths from diphtheria in the twenty-eight towns, 24 occurred in London and 6 in Liverpool. Small-pox caused 9 deaths in London and its outer ring (including 2 in the metropolitan asylum hospital ship off Dartford), 1 in Bristol, and 1 in Liverpool. The number of small-pox patients in the metropolitan asylum hospitals situated in and around London, which had declined in the preceding seventeen weeks from 1389 to 153, had further fallen to 131 on Saturday last; the admissions, which had been 47 and 27 in the preceding two weeks, further declined last week to 18. The Highgate Small-pox Hospital contained 6 patients on Saturday last, no admission having occurred during the week. The deaths referred to diseases of the respiratory organs in London, which had been 152 and 159 in the preceding two weeks, further rose last week to 205, but were 13 below the corrected weekly average. The causes of 62, or 2·1 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Portsmouth, Sunderland, Brighton, Preston, and in seven other smaller towns. The largest proportions of uncertified deaths were registered in Huddersfield, Halifax, Sheffield, and Hull.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 16·6 and 17·4 per 1000 in the preceding two weeks, declined again last week to 16·4, and was 1·2 below the mean rate during the same week in the twenty-eight English towns. The rates in the Scotch towns last week ranged from 11·4 and 13·2 in Leith and Paisley, to 17·0 in Dundee and 18·6 in Glasgow. The 400 deaths in the eight towns included 13 which were referred to diarrhœal diseases, 9 to whooping-cough, 6 to "fever" (typhus, enteric, or simple), 6 to scarlet fever, 3 to diphtheria, 3 to measles, and 1 to small-pox; in all, 41 deaths resulted from these principal zymotic diseases, against 54 and 59 in the preceding two weeks. These 41 deaths were equal to an annual rate of 1·7 per 1000, which was 0·4 below the mean rate from the same diseases in the twenty-eight English towns. The 13 deaths attributed to diarrhœal diseases showed a further considerable decline from the numbers in recent weeks, and were so many as 49 below the number in the corresponding week of last year; they included 7 in Glasgow. The 9 fatal cases of whooping-cough exceeded those in the previous week by 1; 7 occurred in Glasgow and 2 in Edinburgh. The 6 deaths from scarlet fever, all of which were registered in Glasgow, showed a decline from the numbers in recent weeks. The deaths referred to "fever," which had been 10, 3, and 7 in the previous three weeks, were 6 last week, of which 2 occurred in Perth. Two of the three deaths from diphtheria were returned in Edinburgh. The

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fatal case of small-pox was of an infant aged two months, and occurred in Glasgow. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 64 and 59 in the preceding two weeks, further declined last week to 58, and were 7 below the number returned in the corresponding week of last year. The causes of 65, or more than 16 per cent., of the deaths in the eight Scotch towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been 26·7, 22·9, and 22·0 per 1000 in the preceding three weeks, further declined to 21·1 in the week ending the 3rd inst. During the thirteen weeks ending last Saturday the death-rate in the city averaged 22·9 per 1000, the rate during the same period being equal to 18·1 in London and 15·5 in Edinburgh. The 143 deaths in Dublin last week showed a further decline of 6 from the numbers in recent weeks, and included 5 which were referred to "fever," 3 to diarrhœa, 2 to measles, 2 to scarlet fever, 2 to whooping-cough, and not one either to small-pox or diphtheria. These 14 deaths from the principal zymotic diseases showed a further decline from the numbers in recent weeks, and were equal to an annual rate of 2·1 per 1000, the rate from the same diseases being 1·8 in London and 1·7 in Edinburgh. The deaths referred to "fever," which had been 6, 5, and 1 in the preceding three weeks, rose again to 5 last week; the 3 deaths from diarrhœa, on the other hand, showed a further decline from the numbers returned in recent weeks; and those from scarlet fever were fewer by 3 than those returned in the previous week. Three deaths from violence and 3 inquest cases were registered, and 41 of the deaths occurred in public institutions. The deaths of infants showed an increase, while those of elderly persons were fewer than in any recent week. The causes of 30, or more than 20 per cent., of the deaths registered during the week were not certified.

THE SERVICES.

EGYPTIAN HONOURS.

THE Queen has been pleased to grant to Surgeon-Major Benjamin Bloomfield Connolly, Medical Staff, permission to accept and wear the insignia of the Fourth Class of the Order of Osmanieh, conferred upon him by the Khedive in approbation of his distinguished services during the operations in the Soudan of last year.

GRENADIER GUARDS.—Surgeon Edward Nodin Sheldrake, Medical Staff, to be Surgeon, vice C. E. Harrison, M.B., promoted.

MEDICAL STAFF.—The undermentioned Surgeons-Major are granted retired pay, with the honorary rank of Brigade Surgeon:—Frederick Pennington, Owen Owen, John Waring Belcher, M.D., Thomas Young Baker.

INDIA OFFICE.—The undermentioned Officers have been granted a step of honorary rank on retirement:—Deputy Surgeon-General George Stewart Watson Ogg, Madras Medical Establishment, to be Surgeon-General; Brigade Surgeon James Ross, Madras Medical Establishment, to be Deputy Surgeon-General; Surgeon-Major Francis Parsons, Bengal Medical Establishment, to be Brigade Surgeon.

ADMIRALTY.—The following appointments have been made:—Surgeon J. C. Dow, to the *Pembroke*, additional, for Melville Hospital; Surgeon Myles O'C. McSwiny, to Chatham Division, Royal Marines; Mr. Robert Fenner, to be Surgeon and Agent at Cromer.

MILITIA MEDICAL STAFF.—Surgeon-Major Benjamin Baker, 3rd Battalion, the Queen's (Royal West Surrey Regiment), resigns his commission; also is permitted to retain his rank and to wear the prescribed uniform on his retirement.

RIFLE VOLUNTEERS.—2nd Volunteer Battalion, the Queen's Own (Royal West Kent Regiment): Acting Surgeon J. Prior Purvis, to be Surgeon.—3rd Volunteer Battalion, the Duke of Wellington's (West Riding Regiment): Acting Surgeon Thomas Scott, M.D., resigns his appointment; Acting Surgeon Richard Ernest Williamson, M.B., to be Surgeon.

QUADRUPLETS.—A case is reported in the local papers of the wife of a carter at Tunstall having given birth to four living children at one accouchement.

Correspondence.

"Audi alteram partem."

"VICARIOUS MENSTRUATION."

To the Editor of THE LANCET.

SIR,—I am very glad to see that Dr. Samuel Wilks has directed his keen critical sense against this universally accepted "vicarious menstruation." I confess to be in the same position that he is, of never having seen a case which stood the test of examination, and to have acquired a very strong disbelief in the occurrence of anything that could legitimately deserve this name. In one or two instances I have been almost persuaded, and in one remarkable case it was only a very careful investigation into the alleged recurrence of hæmorrhage, due to the opening of an old phlebotomy wound, which disabused me of the belief that I had at last received convincing proof of the alleged occurrence of this alleged phenomenon.

Within the last ten years I have encountered so much reason to release myself from the trammels of traditions which obscure the physiology and pathology of the female organs of generation, that one heterodoxy more or less seems really to matter, but little to me. We have gone on blindly accepting statements which when examined possess no real foundation, and this question of vicarious menstruation, I fancy, is another to be added to the list. One thing which clearly indicates the necessity for Dr. Wilks' proposed critical inquiry is that out of the large number of instances where I have arrested menstruation by the removal of the uterine appendages for various reasons, there has not occurred, so far as I know, a single instance of anything approaching to vicarious menstruation. Surely if such a thing ever did occur it would have occurred in some one of these numerous women, but I have failed entirely to find that it has done so. There must be a theory on the acceptance of vicarious menstruation which would admit that the menstrual condition was one which affects the whole and every part of the system of a woman. There is not the slightest reason to believe that this is really the case. That there are many troubles of a reflex character arising from this peculiar phenomenon is a fact with which we are all familiar; but that it exercises such a universal and extraordinary influence over the whole tissues of the body as to be able to re-open once a month an old wound would involve a theoretical acceptance which I, for one, can see no ground for. I fancy that the so-called vicarious menstruation is about as reasonable as the view which obtains acceptance in country districts that pork will not keep if it has been touched during the process of being cured by a menstruating woman.

I am, Sir, yours truly,

Birmingham, Sept. 26th, 1885. LAWSON TAIT.

To the Editor of THE LANCET.

SIR,—An out-patient presenting vicarious hæmorrhage consulted me yesterday about a couple of hours before I read in the current number of THE LANCET the letter from Dr. Wilks, in which, referring to the Clinical Lecture on the above subject by Dr. Wiltshire, published in your impression of the 19th inst., he states that he has never seen a case of the kind.

The patient, who is forty years of age, is the eldest daughter of a second family. Her father married twice. The children of the first wife were all normally formed. Of the second family (consisting of five girls and a boy) two girls and the boy died young, and nothing more is known about them. Of the survivors, the eldest (my patient) has never menstruated; but ever since she was sixteen years old she has passed (so she states) bright liquid blood per anum every five or six weeks. Her lungs are in a fairly good condition, and she has never had any hæmoptysis. I was unable to detect any uterus; the vagina (?) is scarcely an inch in length. The orifice of the urethra is occupied by a vascular growth, which seems to give but trifling annoyance. The patient has been a widow six years, after a married experience of three years' duration. The urethral tumour appeared two years subsequent to her marriage. She states that her bodily sensations inform her of the on-coming of the periodical anal flux. The second survivor, aged thirty-

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three years, has not only never been married, but has never been "unwell." The third, aged thirty, is married, but was never pregnant, nor has she ever menstruated. It is stated that she is "formed" like her eldest sister. The patient's mother married when she was thirty, and died at sixty-five of "cancer of the womb." Of the patient's maternal aunts, one never married; and neither of the two married ones was ever pregnant, and of these only one had ever menstruated. The maternal aunt of the patient's mother was known to have never menstruated. She had been married, but had never been pregnant. After she had been a widow some years, the result of a criminal trial turned upon the fact that she could never have been *enceinte*. The family here referred to hailed from the eastern counties. I have no doubt that this patient will be attending at this hospital on each of the next few Friday afternoons. I am in possession of her name and address.

I am, Sir, yours, &c.,

BERNARD O'CONNOR.

North London Consumption Hospital, Sept. 26th, 1885.

ON CIRCULAR HOSPITAL WARDS.

To the Editor of THE LANCET.

SIR,—Mr. Henry C. Burdett, by his letter published in your issue of the 3rd inst., complains that the arguments in my paper on Circular Wards (see p. 643) are based upon the consideration of buildings of such large size that my conclusions can have no practical bearing upon the construction of hospitals of ordinary dimensions, and to give force to his remarks he makes the astounding statement that to his knowledge there are only "six hospitals in the United Kingdom which have 500 beds and upwards, and there is not a single hospital in this country which possesses 1000 beds." I am unable to say exactly how many hospitals there may be in this kingdom containing between 500 and 1000 beds, but without reference to the statistics which Mr. Burdett's own writings ought to furnish me with, I can count at least fifteen hospitals in the metropolis alone, each of which provides accommodation for a considerably larger number than 500, and in some cases they contain more than 1000 patients. I also call to mind a very large number of provincial hospitals holding over 500 inmates, and two of them I know to contain respectively 1200 and 1300 patients. How many more there may be Mr. Burdett will perhaps kindly tell us when (as no doubt he will) he confesses the error into which his enthusiasm has caused him to fall.

However, as Mr. Burdett takes exception to my illustration of a building containing so large a number as 576 patients, will he be pleased to suppose the two upper storeys of my ideal hospital removed, and then he will have before him a building precisely the same in plan, but containing accommodation for 192 instead of the 576 patients; and if he will suppose the outlay upon the erection and maintenance of this smaller building also to be one-third that of the larger structure, he will see (by reference to my previous figures, and dividing each of them by three) that the additional cost of this hospital for 192 patients, if built upon the circular instead of the parallelogram system, would be £15,914. But this, as before stated, would be at the rate of £105,135 for every thousand patients housed in hospitals constructed on this circular system. So what has his argument gained by my concession to his demand? As a matter of fact, the supposed one-storeyed buildings would be considerably more expensive than those I proposed (three storeys in height), and it only proves therefore that the adoption of this circular system in small hospitals would be a still greater extravagance than I showed to be the case with regard to the larger establishments.

Mr. Burdett again falls into error when he accuses me of selecting hospitals containing 1000 beds as the basis of my calculations. It is true that I took the number 1000 as the unit of comparative cost; but if I had taken this unit as one or ten, and so had shown the cost per bed or per ten beds to be respectively £105 or £1050, Mr. Burdett would, upon the same grounds as before, have complained that I based my calculation upon the consideration of hospitals containing only one or ten beds, as the case might be, and this would clearly be as great an absurdity as saying that I chose for my example a hospital for 1000 beds.

I have only one other point in Mr. Burdett's letter left me to refer to, and that is his attempt to throw discredit upon the matter contained in my paper by insinuating that I am but a workhouse architect. No one knows better than Mr. Burdett that "my experience as an architect has" *not* "been chiefly confined to the erection of buildings for workhouses and Poor-law purposes"; and he might properly assume that when the Council of the Sanitary Institute of Great Britain did me the honour to request that I would read a paper at Leicester upon the subject of hospital construction, it had taken care to inform itself whether or not I was competent to deal with the subject in all its aspects.

As Mr. Burdett promises you a further communication upon this subject, may I be permitted to beg that he will confine himself to the questions at issue, and that he will not compel me to again weary your readers by untwisting his contortions of the very plain facts contained in the paper you did me the favour of publishing in your valuable journal.

I am, Sir, yours, &c.,

H. SAXON SNELL, F.R.I.B.A.

Southampton-buildings, W.C., Oct. 1885.

APOMORPHIA AND THE NEW BRITISH PHARMACOPŒIA.

To the Editor of THE LANCET.

SIR,—I observe that Dr. Murrell advocates in your columns the use of a solution of apomorphia which has turned green for hypodermic injection, and condemns the British Pharmacopœia for not sanctioning it. I believe, however, that in nearly, if not quite, all the cases in which an injection has been followed by unpleasant symptoms such changed solutions have been used, and it is therefore doubtful whether they should be generally employed. For administration by the mouth and for sprays I use them freely, but for subcutaneous injection I prefer the compressed tablets or the discs. As stated in my "Guide to the British Pharmacopœia," apomorphine would have been a good addition to the new lamellæ.

I may add that camphor-water is a good solvent for salts of alkaloids. Such solutions keep well, and absolute phenol is not always a desirable addition to hypodermic injections. No doubt the many defects of the British Pharmacopœia will excite criticism, and I have not scrupled to offer my share, but it may be questioned whether it would be well for a potent medicine which has undergone obvious change to receive official sanction.

I am, Sir, yours truly,

Dean-street, Park-lane, Oct. 5th, 1885. PROSSER JAMES.

NORTHERN COUNTIES NOTES.

(From our own Correspondent.)

THE NEWCASTLE COLLEGE OF MEDICINE.

THE opening of the Newcastle College of Medicine in connexion with the University of Durham took place on Oct. 1st. The Mayors of Newcastle and Gateshead attended, as well as a contingent from the practitioners of the district, a fair sprinkling of ladies, and a goodly number of the general public. The students were in high spirits, but, all things considered, kept within moderate bounds, although some of the speech-making was listened to with evidence of impatience. Dr. Heath opened the proceedings, after the invited guests had partaken of a capital luncheon, by remarking that two years had elapsed since he had the pleasure of addressing them. He expressed the gratification he felt in common with his colleagues in welcoming so large and brilliant an assembly, observing that the large attendance of medical students augured well for an industrious and successful session. He next referred to the prospect of soon having larger and more convenient college buildings, a greater number of students, and younger, though scarcely more earnest, professors, and he hoped better paid ones. To do all this money was needed. The College of Medicine a good many years ago had given up all proprietary rights, and dedicated the fruits of many years' labour to the cause of medical education. In doing so they thought they had a claim on the public, and also some claim on the Government, and he could not help thinking that the millions which had been buried without result

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in the sands of the Soudan would have sufficed not only to erect the Colleges, but also to endow them. Mr. Gainsford Bruce, Q.C., distributed the prizes. In addressing the students, he enforced energy and industry, and in illustration quoted the following from the writings of Sir Thomas Fowell Buxton:—"The longer I live the more I am certain that the great difference between men—between feeble and powerful, great and insignificant—is energy and invincible determination of purpose. These qualities will do anything that can be done in this world, and no talents, no circumstances, no opportunities will make a two-legged creature a man without it." He told them not to indulge in high-flown or fanciful views of the objects of the profession. It is true that it causes the lame to walk, the blind to see, and the deaf to hear, and was the symbol of the divine mission carried on by men who had neither silver nor gold. He advised them not to ignore the rule which prescribes that men shall labour for their bread, and not to forget that in theirs, as in other professions, honourable remuneration for faithful labour is the great motive of exertion. If there were no fees, he was afraid there would be few doctors; at all events, he was sure there would be no lawyers—a remark that was greeted with applause. He was also of opinion that great benefit would accrue to the public if the medical officer of health had a more independent position and a higher status. He next passed on to another point—namely, truthfulness with patients, and said that nothing could be more derogatory to the profession than the suggestion that the medical attendant deceives his patient, which was said to be done to lull him into security, thinking perhaps the condition of the recovery might thereby be more hopeful. He told them that they would not secure that result by deceit. There was nothing more distracting to a patient than to feel uncertainty as to the nature of his malady. There was comfort even in the inevitable; there was a solace even in despair. "Where the patient has entrusted to you his life, are you to keep from him that secret which is not yours, but his, but which concerns you infinitely more than him?" But, above all these, Mr. Bruce contended there stands another obligation combining amongst men the highest of all considerations—the unquestioning, unhesitating regard for truth. "Upon it depends the maintenance of all relations of life; it constitutes the very bond of society. Liberty is precious; life is precious; but, above all, truth is still more precious." Mr. Bruce, in his otherwise excellent address, did not refer to the manner in which the truth was to be told. This, we know, makes all the difference. A truth blurted out to a sick man without regard to opportunity or mental condition may kill like a poison.

Newcastle-on-Tyne, Oct. 6th.

EDINBURGH.

(From our own Correspondent.)

THE SECRETARY TO THE SENATUS ACADEMICUS.

THE Secretaryship of the Senatus Academicus of the University of Edinburgh, vacant through the retirement of Professor John Wilson, who lately occupied the Chair of Agriculture, has been accepted by Professor Kirkpatrick. Professor Kirkpatrick is the present occupant of the Chair of Constitutional Law and History, and is Dean of the Faculty of Law.

ADDITIONAL ACCOMMODATION AT THE ROYAL INFIRMARY.

Alterations have been commenced at the Edinburgh Royal Infirmary which will have the effect of placing twenty-four additional beds at the disposal of the physicians upon the staff of that institution. The infirmary is built on sloping ground which has a considerable inclination to the south; and thus it happens that the southern extremities of the long medical pavilions are apparently taller by one storey than the northern ends. At the south end of each pavilion there is a large well-finished room on the ground floor, with a sunny exposure and with windows opening upon the grounds that surround the buildings. Each room is capable of accommodating twelve beds. Until now these rooms have not been utilised, partly on account of want of funds, but chiefly because there was no suitable means of access to them, as the only entrance was through the cellars and stores beneath the northern end of each pavilion, which are partially subterranean. To bring two of the rooms into use, and at the same time to obviate any considerable increase of the nursing staff, strongly built winding staircases are in course of erection in the western turrets of the two central medical pavilions. These will place the rooms on the ground floor in direct communication with the wards above, and will permit of their being administered by the same staff of physicians and nurses. The alterations, which will cost about £400, are being carried out under the direction of Mr. Sydney Mitchell, architect.

THE HEALTH OF EDINBURGH.

The death-rate for the city during the month of September was 13·93 per 1000. This compares very favourably with the average rate for the same month in the five preceding years, which was 16·51 per 1000. For the quarter ending September 30th the death-rate was 14·33, as compared with 16·51 per 1000 for the corresponding quarter in the preceding five years. During September 76 cases were treated in the Fever Hospital, of which 45 were cases of typhoid fever, one of measles, one of small-pox, twenty-three of scarlatina, and six of erysipelas.

UNIVERSITY BUILDINGS COMPLETION.

A letter has been addressed to the Town Council of Edinburgh by Professor Turner, interim convener of the Building Committee of the University Buildings Extension. In it he states that some time ago the committee found that a sum of £15,000 was requisite for completing the educational buildings. A sum of £5000 had been proffered by Mr. McEwan, which would be forthcoming when the remaining £10,000 had been obtained. A sum of £7000 had already been raised by public subscription towards this end, and the Town Council is now appealed to, in the hope that it will see its way to complete the fund. Considering the immense benefit the University confers upon the city, by attracting so many students to live in it, this request appears a very reasonable one.

ABERDEEN ROYAL INFIRMARY.

(From our Aberdeen Correspondent.)

DR. GARDEN has returned to the charge and has poured such a broadside into the defences of the House Committee that he has completely silenced their guns, if we except a feeble reply from the Rev. Mr. Calder. In his letter to the managers, Dr. Garden says that in justice to himself he is constrained to call their attention once more to the investigation into his "amputation case"; and he goes on to say, "I now append affidavits from witnesses—patients who were in the ward at the time—which prove that it is true that my patient was left.....entirely alone when in a most critical state." Are the committee preparing to do battle again? Can they? To outsiders it seems impossible, and it is hoped they will make an honourable surrender. If the *Free Press* can see an attempt at defence where none was meant, not even a "feeble" one, and far less an "apologetic" one, it may have all the satisfaction it can extract from the discovery. Both sides of the question would have been given to the readers of THE LANCET had both sides been known, and it is difficult to imagine why this evidence has been withheld so long. Can the committee give any reason?

PARIS.

(From our Paris Correspondent.)

DEATH OF DR. C. ROBIN.

THE Faculty of Medicine of Paris has just sustained a great loss in the death of Monsieur Charles Robin, Professor of Histology, which took place at Yosseron, in the Department of the Ain. He was suddenly seized with an attack of apoplexy, which carried him off in a few hours. He was sixty-four years of age, was a member of the Institute and of the Academy of Medicine, also a Senator for his Department.

ESTLANDER'S OPERATION.

In going through Mons. Tillaux's ward at the Hôtel Dieu about a fortnight ago, I was attracted towards something at the head of a patient's bed that looked, in the distance, like

a musical instrument of small graduated tubes of reeds which is blown by the mouth, and commonly used by shepherds in eastern countries. This was nothing more nor less than portions of ribs (eight in number) of the patient over whose bed's head they were placed. These fragments were fastened together with wire by himself and arranged in the form described above. On inquiry, I learned that the patient, a young man twenty years of age, had these ribs removed from him by M. Tillaux on March 20th last, Estlander's method being adopted. The history of the case, as well as of the patient himself, is very interesting. He is a draughtsman by profession, has an intelligent countenance, and is said to be very adroit with his hands, but he has always, even to the present time, been unfortunate in his career. At five years of age he had an attack of croup, and had to submit to tracheotomy. His mother died from pulmonary tuberculosis; his father, overwhelmed with grief, committed suicide. He lives with two sisters, who are in good health. In the month of May, 1883, he had an attack of simple pleurisy, of which he was relieved by thoracentesis, when two litres of a serous liquid were drawn off. Shortly after he was seized with alarming symptoms, when a puncture was made, and two litres of pus escaped. Soon after this a third puncture was effected, which brought away a little pus. This was followed by a fourth, but without any result. Some months afterwards an abscess, which formed in the thoracic parietes, was opened by M. B. Anger, under whose care he was at the time, and the discharge kept up by a drainage tube. In November, 1883, the patient, whose health seemed to be on the decline, entered M. Siredey's medical ward at the Lariboisière Hospital, and this physician, finding the side very much swollen, requested M. Felizet to practise the operation for empyema, when two litres of pus were evacuated, and the patient's health somewhat improved after this. The empyema, however, was not cured, and there remained a fistulous opening, through which a solution of chloride of zinc was injected. This treatment was continued for four months, but M. Tillaux, not finding matters mending to his satisfaction, decided on performing Estlander's operation, which he put in execution as beforementioned. Eight ribs (from the tenth to the 3rd) were removed from the left side, and three large drainage-tubes were placed in the wound, which was united by metallic sutures, and all performed on the strict principles of Listerism. Considering what the patient had gone through, he is doing remarkably well. With the exception of a small opening in which is placed a drainage-tube about two inches long, the surgical wound is healed, and the patient seems to suffer no inconvenience from the operation. His breathing is quite free, his health fairly good; but I cannot help thinking it would be better if he were away from the foul air of the hospital ward. On my return to the Hôtel Dieu last week I found another patient who had been operated on according to Estlander's method by Dr. Bouilly, who was acting for M. Tillaux during his temporary absence. In this case also the patient was a young man of twenty-two. He contracted pleurisy about two years ago at Algiers, where he was a soldier. He had been tapped several times, but as there was no tendency towards recovery and urgent symptoms having set in, Estlander's operation was performed last Friday week, when seven ribs in the anterior aspect of the chest on the left side were removed. The patient is doing well. There is no history of tubercular disease in his family.

DEATH OF DR. TAYON.

At the last meeting of the Société Nationale d'Agriculture the President announced the death of Dr. Tayon, Professor of Zoology and Zootechny at Montpellier, at the early age of thirty-two. The death of this young *savant* will be a great loss to science. He made several interesting researches on the ovine breeds of the South of France, and on the microbe of typhoid fever, which latter subject was noticed in THE LANCET of August 29th.

Paris, Oct. 7th.

THE GOVERNMENT AND THE WATER COMPANIES.—It is rumoured that the question of the purchase of the London Water Companies by the Government is again about to be brought forward, and that Colonel Sir F. Bolton has been conducting the necessary negotiations with the companies in accordance with the wish of the Government, to settle the matter at an early date.

ITALY.

(From our own Correspondent.)

AN Italian critic has reproachfully defined his compatriots as a "carnival people," eternally holding anniversaries, unveiling statues, exhuming "claimants" to this invention or that discovery, burying and reburying their dead, and turning their backs on the "living present." The definition, justified as it was at the time, is steadily losing its significance, and year by year young Italy is proving her sense of the duties she owes to herself and to civilisation, and asserting her right to a very prominent place in the van of progress. Her scientific congresses bear eloquent witness to this reawakening. Formerly the jealousy of her numerous petty rulers tolerated no such assemblies—nothing but *dilettanti* academies or Arcadias representing in her capitals the Royal Societies and Institutions in vigorous life among ourselves. Now, however, not a year passes without the gathering together of well-organised congresses of her men of science in one or other of the many fields of inductive research. Within the last month two such assemblies have held their sittings, both of them highly successful, and very interesting directly or indirectly to the medical investigator. The first had its seat at Florence, and was devoted to meteorology in its most practical bearings on climate and national development. Its president was the learned and indefatigable Padre Denza; and among its leading members were De Rossi, the parent, as he has been called, of seismology, or the science of earthquakes, and Faralli, Pagliani, De Giorgi, and Count Almerico da Schio, well known for their investigations on the influence of meteorology on hygiene and biology. The discussions will shortly see the light in an official report; and in the meantime I may gratify your readers with a pleasant specimen of the literature with which the severer work of an Italian Congress is frequently diversified. An excursion of the meteorologists to Vallombrosa culminated in a banquet at which, amongst the various toasts given and acknowledged by the entertainers and their guests, the following epigram was improvised by the Roman advocate, Caroselli, in compliment to Tuscany and the services of her sons to science:—

"Civis romanus sum: vobis, optima proles
Italiae, exsultans verba paterna fero.
Aerias tentate domos et viscera terrae,
Lyceis oculis, aequoreosque sinus.
Vitae arcana micant coelo, fremit intima tellus
Aer et infusis multa revelat aquis.
Nil desperandum Denza duce et auspice magno
Humberto, omnipotens signa coronat amor.
Salve magna parens, iterum mirabilis aevi
Sceptra parant nubes, sidera, terra, mare."

The following may be accepted as a rough and ready translation:—

"A son of Rome, her benison I bear
To you the noblest of Italian birth,
Whose task it is to probe the heart of earth
And heaven's and earth's dark import to declare.
Life's mysteries are throbbing in the air,
Reverberate in the telluric storm,
And flit with Proteus and his ocean-swarm,
Nor yet elude your ken. Can ye despair
With Denza for your guide and Humbert king,
Knight-errants of Dame Nature, whose reward
Fresh lustre on your oriflamme shall fling?
Hail mighty mother, Italy! Bright-starred
Thy destinies in hands of sons like these,
Whose sway controls the heavens, the earth, the seas."

The eleventh congress of the Italian Medical Association, just held at Perugia, was in some respects more memorable than the most brilliant of its predecessors. Concurrently with its meeting the Royal Italian Society of Hygiene was to have been convened at Turin, but the promoters of these congresses, to obviate the inconvenience of two closely connected programmes being carried out the same week in different parts of the peninsula, agreed to combine their forces and to have one assembly in common. The hygienists accordingly held their discussions in the section of Public Sanitation, which the Medical Association always includes in its programme, the Umbrian capital being the rendezvous. The proceedings extended over so vast a field that I can only indicate a few of the subjects in which special interest was taken, subjects chiefly introduced by the representatives of the Florentine "Istituto di Studi Superiori." Prof. Chiara read a very original paper on Recent Advances in Operative Surgery, and Prof. Tafani on some Important

Contributions of Microscopy to Medicine. Electricity, as became the fatherland of the science, especially in its bearings on therapeutics, came in for a large share of attention, chiefly at the hands of Dr. Turchini and Prof. Dall'Eco, who exhibited electrical apparatus of a very ingenious and practical kind. The admirably appointed museum, which was a prominent adjunct to the congress, was particularly rich in models of ambulance service and field hospitals; while invalid cookery had a department to itself, and the orthopædists and gynæcologists had their special wants consulted in several new and effective additions to their *armamentaria*. Nor must I omit mention of the startling specimens of animal petrifaction contributed by the veteran Dr. Comi, who, since 1834, has shown in a hundred different ways how human cadavera can be utilised for the manufacture of tables, desks, and such-like furniture, of exceptional solidity and elegance.

Cholera is on the decline in Sicily, and calm has everywhere been restored throughout the island. In the peninsula the malady makes no progress, and indeed it would not have effected a foothold at all but for its direct importation from the French Riviera. At Borgotara, for instance, in the province of Parma, its appearance was distinctly traced to an Italian workman from Marseilles, who, having recovered from an attack of it in that city, came on a visit to his Parmesan relatives, bringing with him the clothes and linen he had worn during his illness. The laundress at Borgotara, who washed these articles, contracted the disease and died; and from her it spread to numbers of her neighbours, with the fatal effect we already know. As an illustration of the difficulties our Italian brethren have to overcome in their struggle with cholera, I may relate the following story which comes to me from Castellammare, in Sicily. The lower orders there are firmly pursuaded that just before the outbreak of the disease there came to the town an old man with a white beard, long arms, truculent aspect, and sinister smile, at whose approach the children fled and their parents involuntarily shrank back. The old man, however, disarmed their fears by the enticing sweetness of his voice, inviting the youngsters to him with the offer of bon-bons which he took from his pocket, each about the size of a duck's egg. He was soon surrounded by his eager little friends, who greedily demanded the sweetmeats, till, his supply being exhausted, he disappeared. Since that day cholera has decimated young and old in Castellammare and in the other towns visited by the hoary stranger. The people are ready to swear they have seen him with their own eyes, and consider him as the cholera in human shape. "What are the priests about?" asks the *Statuto* of Palermo. But, indeed, these ministers of the Gospel are little, if at all, superior to their flocks in freedom from degrading superstition.

The treatment which has been most successful in the recent outbreak of the disease has been that of Dr. Tunisi of Vicenza—to wit, large doses of laudanum given *coup sur coup* at the very first attack of diarrhœa, however slight. In a striking pamphlet entitled "Cura Specifica del Cholera" (Vicenza, sixth edition, 1885), he gives his experience as an army surgeon in the Crimea (1854-55), at Messina (1867), and at Gaeta (1873), and certainly his array of facts seems very convincing in proof of his success. "During the epidemic at Messina," he says, "which lasted three months, I did my utmost to induce the officers and soldiers of the garrison to call in medical aid on the first and slightest symptom of diarrhœa. Of the sixty officers who were in quarters, some twenty were my intimate friends, and had the greatest confidence in me. We messed together, and, following my advice, each of them was never without a small well-stoppered phial of laudanum—the laudanum liquidum of the English Hippocrates, Sydenham,—from which they took from fifteen to twenty drops the moment they felt any abdominal disturbance, until the symptoms ceased. Not one of them suffered from the cholera which was raging around. Of the other officers, however, whom I did not know personally, and who allowed the diarrhœa, though slight, to go on, trusting to check it by the usual means when it became serious, nineteen turned alarmingly ill, and of these fifteen died of cholera. If such was the practice of so many of the officers, imagine what work I had to get a hearing from the rank and file, who never complained till long after the preliminary diarrhœa. I asked and obtained from the colonel of the regiment to have the latrines watched, and every soldier who repaired thither and showed signs of abdominal disturbance reported to me. Every suspicious case was then brought to the infirmary specially appointed for the reception of such, and it was soon found that as the wards filled the cases of confirmed cholera became less and less frequent in the regiment. About two hundred were treated promptly and liberally with laudanum, and among these not one reached the second stage of the disease, but all, after a few days' interval, went out cured." Dr. Tunisi's little work has had a large circulation in a Spanish version, and his method has been practised with great success in that peninsula, as I see from the interesting evidence of Spanish practitioners given in the *Opinione*.

Professor Falconi, of the University of Cagliari, has found another preparation highly serviceable in the premonitory stage of cholera. Centinodia (the French *renouée*, the English knotgrass) in decoction (100 grammes of the centinodia to 400 grammes of water) checks at once the first symptoms of abdominal disturbance, which, if allowed to go on unarrested, carry the patient rapidly into the second, or practically incurable, stage. Dr. Falconi has given a full account of his experience of the herb in *Lo Spallanzani*, and dwells on the facility with which it may be procured. "Centinodia is found," he says, "almost everywhere, and is very abundant in the summer months. It has its habitat in the deserted squares and unfrequented streets of cities, in gardens and moats, and along provincial roads and lines of railway. It is a domestic remedy, and, if employed promptly on the first hint of diarrhœa, checks the malady effectually. Its styptic action seems due to the tannic acid it teems with." Once familiarised in common use, Dr. Falconi looks to it to prevent the panic which is cholera's most formidable auxiliary.

Obituary.

JAMES RUSSELL, M.D. LOND., F.R.C.P., J.P.

BY the death of Dr. James Russell, after a long illness, on the 5th inst., Birmingham has lost its senior consulting physician, and one of its most honoured citizens. Born there on April 1st, 1818, Dr. Russell had the advantage of the best associations and professional training. His family is one of the oldest and best connected in the district, and his father held a leading position as a medical practitioner for half a century. Dr. Russell received his professional education at King's College, London, and originally devoted himself to the practice of surgery; but, having taken the degree of Doctor of Medicine at the London University in 1848, he, in the course of a few years, became a Member of the Royal College of Physicians of London, and in 1867 was elected a Fellow of that body.

In early life Dr. Russell was for some years physician to the Birmingham General Dispensary, and in 1859 was elected physician to the local general hospital, discharging all the duties of that office with conspicuous ability and zeal until the end of last year, when he was elected consulting physician; the office of senior physician devolving on Dr. Willoughby Wade, who now holds it.

Dr. Russell occupied the chair of all the local medical societies in succession, and was for many years a trustee of the Medical Benevolent Fund. He took the deepest interest in the Birmingham Medical Institute from its foundation, and was chosen president in 1882. He published many able lectures and clinical essays; but his beneficent influence was chiefly exerted at the bedside. Always gentle and sympathetic in mien and speech, he won the confidence of patients and the devoted attachment of students. Very rarely has a more touching testimony been borne to the relations of a clinical teacher and his class than the pathetic incident which occurred at the Queen's College, Birmingham, on the opening of the Session, the 2nd inst. Mr. Augustus Clay, at the invitation of the Warden and speaking for the students, stated that 109 of them had subscribed to a fund to present an address to Dr. Russell on his retirement from the position of a clinical teacher, which he had continued to hold for some years after he had resigned the Professorship of Medicine at Queen's College. Mr. Clay said that, though Dr. Russell's serious illness prevented the presentation of the testimonial, even privately, the subscribers hoped to do something to perpetuate the name of their most industrious and most kind teacher,

towards whom they cherished a feeling which could only be expressed by the word "love." Mr. Priestley Smith, who was intimately related to Dr. Russell, had acquainted him with the fact that the address which was to have been presented that evening had been prepared, though his illness rendered it impossible that it should be even read to him. Dr. Russell then with great difficulty dictated the following words in answer: "To the students of the Birmingham Medical School.—My association with the medical students was always one of the chief enjoyments and satisfaction of my life. I have formed amongst them many valuable friends. I know very well how very imperfect my teaching has been; if I had to do it over again I could do it much better. The kind feeling of the students has been continuously shown to me. I well remember, when a vacancy at the hospital was declared, that all my friends were away. I felt utterly deserted for that day. I knew the imminent importance of immediate action; I almost gave it up in my mind, but I bethought me of Sydenham College. I sent down, and in the course of a couple of hours I was surrounded by young and active friends, and they stuck to me to the last. I am not aware of any quarrel with more than two of my students, and both of them became most active supporters of mine in the election. I wish I could recall half my valuable clinical clerks, and thank them; but I cannot. I can say no more. I have dictated this under great straits. I thank them all most fervently for their good feeling and their address. I have no breath for more.—59, Calthorpe-road, Oct. 1st, 1885."

Always true to the strictest standard of personal honour,—faithful to the best traditions of the profession,—in his home and in public life,—on the Bench and amongst the poor, Dr. James Russell won, and held fast, the esteem and affection of all who had the privilege of coming into contact with him. He never ceased to be a student,—was always a peacemaker; a liberal in politics, in religion a nonconformist, he was consistently earnest, never intolerant.

STEPHEN MONCKTON, M.D., F.R.C.P.

THIS eminent physician expired at his residence in Maidstone on the 30th ult., at the comparatively early age of sixty-one. His career illustrates very forcibly the great influence exerted by members of our profession over an entire community when endowed, as the subject of this notice was, with a high order of intellect, great scientific attainments, and unimpeachable moral character. We have before us the notices of the late Dr. Monckton which have appeared in the Maidstone press since his decease; and although these are couched in language of the highest panegyric, we have reason to know that the writers only faithfully expressed the opinions and feelings entertained of and for the good Doctor by his contemporaries of the town and county in which he lived and worked for almost a quarter of a century.

Stephen Monckton came of an ancient family of doctors who had practised, in long line of successive generations, in his native village of Brenchley, in Kent. He was a student of King's College, London, in the days when Lonsdale, Daniell, Fergusson, Todd, Simon, Bowman, and George Johnson were shedding lustre on that school of medicine, and he was himself known among his fellows as a man of mark and promise. He graduated at the University of London when yet in its infancy, when as yet devoid of local habitation, and only slowly struggling into that high and honourable position to which it has since attained. Like so many other eminent provincial consultants, he commenced work as a general practitioner, and for fifteen years knew full well the laborious duties, heavy responsibilities, and valuable experiences of that branch of the profession. In 1861 he removed to the county town, taking the post of physician to the West Kent General Hospital on the death of Dr. Plomley, and since then he has been in Maidstone all that we deem a consulting physician ought to be. His practice was a large one, extending over the greater part of the county of Kent; popular with and much in request among the general public, he was yet more so with his brother practitioners, for they knew him to be as honourable, straightforward, and loyal to themselves as he was able to be, and wishful to be, of use to their patients. He was essentially a man of punctuality; methodical in the investigation of a case; prompt in diagnosis; clear, decisive, and forcible in the exposition of his views as to the pathology and treatment of the case in hand. In prognosis he seems to have had especial skill, and numberless instances are given in which his opinion as to the mode and period of termination of cases has been exactly verified by the result.

But it was not only in strictly professional knowledge and skill that Dr. Monckton excelled; the versatility of his genius, the activity of his brain, and the energy of his character led him in turn into every department of science, literature, and politics, and made him eminently successful in the pursuit of each. As a public speaker and lecturer he was almost unrivalled; on the platform he was in his element; the flow of his ideas was so ready and brilliant, his command of language so perfect, his sense of humour so keen, and the expression of his meaning so clear and forcible that audiences hung upon his lips and masses of men were swayed by his eloquence, convinced by his arguments, and carried away in his own enthusiasm. The region of politics is one which it is rarely safe for the medical man to enter upon with any vehemence; but few men have plunged more deeply into the vortex of political strife than did Dr. Stephen Monckton, and fewer still have done so with less evil consequences to himself. He held the strongest Conservative views; was an active and enthusiastic partisan; indeed, was for many years the recognised leader of the Conservative party in Maidstone, and led it to victory at the General Election in 1880; yet he was on the best of terms with all, was personally the friend of his most ardent opponents, and highly esteemed by those who could not agree with his political views.

Dr. Monckton was not a voluminous writer. The remains of his work consist chiefly of the reports of his numerous speeches on a great variety of subjects, political, scientific, and social; yet he occasionally contributed practical papers to the medical periodicals. The latest production of his pen was a small pamphlet entitled "The Metaphysics of Natural History," a suggestive little essay, on which were based some comments that appeared in our columns on March 21st of the present year.

The disease by which this valuable life was taken was primarily cardiac—mitral incompetency with dilatation, known to have been in existence for some two or three years; but Dr. Monckton succumbed at last to that somewhat rare sequel of this condition which was first noticed by the late Dr. Murchison, and was the subject of his last clinical lecture—viz., intermittent pyrexia dependent on ulcerative endocarditis; indeed, the symptoms of his last illness were very closely those reported by Dr. Bristowe in a lecture given in the year following that by Dr. Murchison, and illustrated by several cases in which multiple embolism was the accompaniment of such paroxysmal pyrexia.

Medical News.

SOCIETY OF APOTHECARIES.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on the 1st inst.:—

Francis, Alfred George, M.R.C.S., Southchurch, Essex.
Jaynes, F. J., M.R.C.S., Wormington Grange, Gloucestershire.
Oliver, George Henry, M.R.C.S., French Gate, Doncaster.

On the same day the following gentleman passed his examination in the Science and Practice of Medicine, Surgery, and Midwifery, and received a certificate to practise:—

Ewens, G. F. W., Ealing House, West End, Hammersmith.

CREMATION is said to be beginning to make way in the United States. Buffalo has built a crematory. Troy and Rochester are talking of following suit, while Detroit is preparing to build an expensive structure for the purpose.

PRESIDENT CLEVELAND has deputed Dr. Shakespeare to visit Europe to investigate the cause of cholera, and to ascertain the best means of preventing an outbreak of the disease.

BRITISH MEDICAL BENEVOLENT FUND.—Dr. Broadbent asks us to state that the Hon. Dr. Beanley of Melbourne, who is now in this country, has made a third donation of £100 to the above charity.

A BARQUE on which a seaman died rapidly of a disease resembling cholera during the voyage arrived in the Tyne on Monday. The vessel was thoroughly examined by the officers of the Tyne Port Sanitary Authority and disinfected. The remainder of the crew were found to be well.

THE SMALL-POX IN CANADA.—A brief renewal of the rioting took place on Tuesday night in Montreal. The deaths from small-pox on that day numbered 24, and 72 new cases were reported; 41 deaths occurred on Wednesday.

LIBERALITY TO FAMILIES OF MEDICAL MEN.—The Zaragoza authorities have arranged to allow a pension of 1500 francs a year to the families of all doctors who have died from cholera in that province.

THE sum of £25 has been awarded by the St. Pancras Board of Guardians to Mr. C. C. Claremont, public vaccinator to the parish, in consideration of the special services rendered by him during the late small-pox epidemic.

HOSPITAL SATURDAY FUND.—Mr. S. Morley writes to the daily papers to state that all collection sheets for the workshop collections on behalf of the Hospital Saturday Fund, as well as the amounts collected, should be forwarded to the offices of the fund by the end of the present month.

STANLEY HOSPITAL, LIVERPOOL.—On Tuesday afternoon last Lord Derby formally opened two new wings to this hospital, to which he presented the 10,000 yards of land required. He also contributed £1000 to the general fund of the hospital.

THE LIGHTING OF RAILWAY CARRIAGES.—Persons who travel much by railway will be gratified by the intelligence that Pintsch's system of lighting railway coaches by oil-gas is rapidly displacing the abominable oil lamps which have for long annoyed and worried passengers by trains.

MEDICAL MAGISTRATES.—Dr. David Greig of Dundee and Mr. Charles John Mill of Kirriemuir have been appointed Justices of the Peace for Forfarshire. Dr. Joseph Pratt has been placed on the Commission of the Peace for the County of Armagh.

THE COUNTESS OF DUFFERIN'S FUND.—We understand that the Lord Mayor will preside at a meeting at the Mansion House, on the 20th inst., in furtherance of the objects of the National Association for Supplying Female Medical Aid to the Women of India, and that a subscription list will be subsequently opened.

SINKING OF A HOSPITAL SHIP.—The hospital stern-wheel paddle steamer *Alexandria*, with forty invalids on board, sank at 3 o'clock on Monday morning, while moored to the river bank, twenty miles to the south of Edfou. All on board were saved. It is expected that the vessel will become a total wreck.

THE DWELLINGS OF THE POOR.—At a meeting of the Mansion House Council on the Dwellings of the People, held at the Mansion House on Wednesday, the honorary secretary reported being in correspondence with the Local Government Board and the Home Office respecting inquiry into the sanitary condition of Clerkenwell and Mile-end Old Town, which has been suggested by the Council.

SOCIETY FOR THE STUDY AND CURE OF INEBRIETY.—A general meeting of this Society was held in the rooms of the Medical Society last Tuesday, the President, Mr. Norman Kerr, in the chair. Papers were read by Mr. Carsten Holthouse and Mr. E. G. Robertson. In the discussion which ensued Messrs. Poole, H. W. Williams, Geo. Robertson, Jabez Hogg, and Edwards took part. A resolution of condolence with the relatives of a deceased associate, Earl Shaftesbury, was agreed to.

PROPOSED COTTAGE HOSPITAL.—At a meeting held recently in the Town Hall, Swindon, under the presidency of Mr. H. Kinneir, a resolution was passed affirming the desirability of establishing "a cottage hospital for Swindon and district for curable diseases, not infectious, and accidents," and a commitee was appointed to take steps for giving effect to the resolution and obtaining the necessary information as to the probable cost of such an undertaking.

GLASGOW MEDICO-CHIRURGICAL SOCIETY.—At a meeting of the above Society, held in the Faculty Hall, St. Vincent-street, on the 2nd inst., the following gentlemen were appointed office-bearers for the session 1885-86:—President: Dr. G. H. B. Macleod. Vice-President: Drs. David Taylor (Paisley) and Lapraick. Council: Drs. Wm. Whitelaw (Kirkintilloch), W. A. Wilson (Greenock), J. A. Lothian, Wm. Patrick, M. Thomas, A. M. Robertson, S. J. Moore, and A. Wood Smith. Secretaries: Drs. Wallace Anderson and W. G. Dun. Treasurer: Dr. Hugh Thomson.

GLASGOW SOUTHERN MEDICAL SOCIETY.—At the annual meeting of this Society, held on the 1st inst., the following gentlemen were elected office-bearers for the session 1885-86:—President: W. Carr, M.B. Vice-President: Fred. A. Freer, L.F.P.S.G. Treasurer: E. M'Millan, L.R.C.S.E. Secretary: James Hamilton, M.B. Editorial Secretary: John Glaister, M.D. Seal Keeper: David Tindal, M.D. Court Medical: A. Napier, M.D. (Convener); R. Pollok, M.B.; A. Carmichael, M.D.; R. Park, M.D.; James Morton, M.D. Extra Council: W. J. Shaw, M.B.; A. Rankin, M.B.; and David Knox, M.B.

METROPOLITAN BOARD OF WORKS.—At the meeting of the Board on the 2nd inst., this Committee brought up a report on some alleged irregularities which had occurred in connexion with the Dangerous Structures Department of the Board. The report entered into detail with regard to the charges made against the department, and stated that the Committee "regret to find that some irregularities have occurred in the department," though they mention certain qualifying circumstances. The passage quoted, however, was modified on being put to the meeting by the omission of the words "some irregularities," and the substitution of the following:—"The superintendent of the Dangerous Structure Department gave an extension of time without the sanction of the Board."

QUEEN'S COLLEGE, BIRMINGHAM.—At the annual conversazione on the 2nd inst, the folowing prizes were awarded:—Anatomy (senior): Medal, E. A. Sadler; certificates, B. W. Housman and G. T. C. Barber. Anatomy (junior): Medal, W. E. Bennett; certificates, J. W. B. Pogson, J. F. Jordan, and A. Kingsland. Practical Anatomy (senior): Medal, E. A. Sadler; certificate. G. T. C. Barber. Physiology (senior): Medal, E. A. Sadler. Physiology (junior): Medal, G. T. C. Barber; certificates, J. W. B. Pogson and J. A. Ferraby. Practical Physiology: Medal, A. Kingsland. Chemistry: Certificate, J. Russell. Practical Chemistry: Certificate, A. Rollason. Medicine: Certificate, W. B. Featherstone. Surgery: Medal, W. B. Featherstone; certificates, C. D. Fitch and A. H. Nott. Pathology: Medal, W. Clarke; certificates, L. A. Taylor and M. H. Vinrace. Botany: Medal, J. F. Jordan; certificate, W. E. Bennett.

SCHOLARSHIPS.—The following awards have been announced;—At *Guy's* Hospital the entrance scholarship in arts of 125 guineas has been awarded to Mr. Henry Woolmington Webber, and the entrance scholarship in science of 125 guineas to Mr. Frederic William Hall. At the *London* Hospital the entrance science scholarship of the value of £60 has been awarded to Mr. David Brown, and that of the value of £40 to Mr. J. N. Collins. At *St. Mary's* Hospital the open scholarships in natural science of the value of £60 each have been awarded to Messrs. G. Watson, A. F. Stabb, and G. A. Simmons; those of £50 each to Messrs. C. E. Lansdown, H. A. Caley, and V. W. Low; and those of the value of 50 guineas each, for students of Epsom College, to Messrs. J. J. Knox and S. P. Matthews. At *Charing-cross* Hospital, the Entrance Scholarship of £30, tenable for one year, has been awarded to Mr. F. H. A. Taylor, and that of £20, tenable for one year, to Mr. J. H. T. Goodwin.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

ANDERSON, JOSEPH, M.B. & C.M.Aber., has been appointed Senior House-Surgeon to the Preston and County of Lancaster Royal Infirmary, vice C. J. Heath, M.R.C.S., L.S.A.Lond., resigned.

ANDERTON, WILLIAM, M.R.C.P.Ed., F.R.C.S.Ed., has been reappointed Medical Officer and Public Vaccinator for the Ormskirk District of the Ormskirk Union.

ASHWORTH, JAMES HENRY, M.R.C.P.Ed., L.F.P.S.Glas., L.S.A.Lond., has been reappointed Medical Officer of Health for the First Division of the Halstead Rural Sanitary District.

BROMLEY, JOHN BOURNE, M.R.C.S., L.S.A.Lond., has been reappointed Medical Officer of Health for the Second Division of the Halstead Rural Sanitary District.

CARPENTER, GEORGE ALFRED, M.R.C.S., L.S.A.Lond., has been elected Registrar and Chloroformist to the Evelina Hospital for Sick Children.

CLEMENT, R. J., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Resident Clinical Assistant to St. Luke's Hospital, London, E.C.

EMBREY, Mr. GEORGE, has been appointed Public Analyst for the City of Gloucester.

EMRYS-JONES, A., M.D.Ed., M.R.C.S., has been appointed Visiting Ophthalmic Surgeon to the Bolton Infirmary.

FREEMAN, W. T., L.R.C.P.Lond., has been appointed Medical Officer and Public Vaccinator for the Fifth District of the Bradfield Union.

GREVES, E. HYLA, M.S., has been appointed Pathologist to the Liverpool Royal Infirmary, vice A. Creswell Rich, M.B., M.R.C.S., resigned.

HASWELL, NARCIS RICHARD, M.R.C.S., L.S.A.Lond., has been re-appointed Medical Officer of Health for the Helston Rural Sanitary District.

MAYNARD, FREDERIC, M.B.Durh., M.R.C.S., L.R.C.P.Lond., has been appointed Assistant House-Surgeon to the Preston and County of Lancaster Royal Infirmary, vice Moore, promoted.

MOORE, WALTER FRANCIS, M.B.Durh., M.R.C.S., has been appointed Junior House-Surgeon to the Preston and County of Lancaster Royal Infirmary, vice Anderson, promoted.

MURDOCH, JAMES W. A., M.B., C.M.Glas., has been appointed Assistant Medical Officer to the Berks County Lunatic Asylum, vice John Barron, M.D., resigned.

NELSON, GEORGE DAWSON, M.D. St. And., M.R.C.S., L.S.A.Lond., has been appointed Medical Officer of Health for the Bridlington Urban Sanitary District, vice Allison, whose appointment has expired.

NOBLE, JOHN, M.B., C.M.Ed., has been appointed House-Surgeon to Barnhill Hospital, Glasgow, vice Dr. Gibb, resigned.

POWELL, J. HARRY, M.R.C.S., L.R.C.P.Ed., has been appointed House-Surgeon to the Weston-super-Mare Hospital and Dispensary.

STAPLE, JAMES D., L.S.A.Lond., has been appointed Resident Clinical Assistant at St. Luke's Hospital, London, E.C.

THORBURN, WILLIAM, M.B., B.S., B.Sc.Lond., has been appointed Surgical Registrar to the Manchester Royal Infirmary, vice Prof. A. H. Young, resigned. Also appointed Surgical Tutor to the Owens College, Manchester.

WALSH, W. ARTHUR STEPHENSON, M.R.C.S., L.S.A.Lond., has been appointed Medical Officer for the Holt District of the Martley Union.

Births, Marriages, and Deaths.

BIRTHS.

BOOKLESS.—On the 2nd inst., at The Cheviots, Wimbledon, the wife of J. Pitcairn Bookless, M.D., of a daughter.

GAIRDNER.—On the 1st inst., at the College, Glasgow, the wife of Professor Gairdner, M.D., L.L.D., of a son.

WALLER.—On the 1st inst., at Lynden House, 29, Abbey-road, N.W., the wife of Augustus Waller, M.D., of a son.

WARREN.—On the 2nd inst., at New Brompton, Kent, the wife of E. C. Warren, L.R.C.S.Ed., of a daughter.

MARRIAGES.

COHEN—ASHER.—On the 6th inst., at the Central Synagogue, Great Portland-street, Abraham Cohen, M.A., M.D., of Stranraer-place, Maida-vale, to Hannah, only daughter of Asher Asher, Esq., M.D., Endsleigh-street, Tavistock-square.

MEREDITH—GREEN.—On the 15th ult., at Trinity Church, Boston, U.S.A., by the Rev. Phillips Brooks, assisted by the Rev. Wm. Lawrence, William Appleton Meredith, of Queen Anne-street, London, to Caroline Sargent, daughter of Henry A. Green, Esq., of Boston.

MURRAY—LEATON-BLENKINSOPP.—On the 1st inst., at St. Pancras Church, William Murray, M.D., F.R.C.P. Lond., Jesmond-park, Newcastle-on-Tyne, to Lucy Claudine, widow of Col. G. A. Leaton-Blenkinsopp, of Hoppyland Park, Co. Durham.

PAULIN—COLTHURST.—On the 1st inst., at the Parish Church, Thurloxton, Somerset, William Bradshaw Paulin, M.R.C.S., to Florence, daughter of the late Thomas Colmer Colthurst, of The Manor, Thurloxton.

PYLE—HEWETT.—On the 1st inst., at St. Augustine's, Northam, Southampton, Charles John Pyle, M.R.C.S., Ravensworth, Burgess-hill, Sussex, to Alice Mary, youngest daughter of the late George Hewett, of Mortimer, Berks.

STAWELL—SMITH.—On the 1st inst., at Ballynanty House, Co. Limerick, J. Cooper Lloyd Stawell, M.B., Bagenalstown, to Charlotte Mary Wilmot Smith, second daughter of Charles Wilmot Smith, Esq., J.P., of Ballynanty House, and the Hon. Mrs. Wilmot Smith.

DEATHS.

CRANE.—On the 30th ult., at Danett House, Leicester, Joseph Wyatt Crane, M.D., in his 81st year.

MARKBY.—On the 4th inst., at Stanley Villa, Zetland-road, Bristol, after many years of suffering, Thomas Markby, M.R.C.S., L.S.A.Lond., aged 47.

MOGER.—On the 1st inst., Robert George Moger, F.R.C.S., late of Highgate, aged 78.

MONCKTON.—On the 30th ult., at his residence, in Maidstone, Stephen Monckton, M.D., F.R.C.P., aged 61.

RUSSELL.—On the 5th inst., at his residence, 59, Calthorpe-road, Edgbaston, James Russell, M.D., formerly Senior Physician to the General Hospital, Birmingham, aged 67.

N.B.—A fee of 5s. is charged for the Insertion of Notices of Births, Marriages, and Deaths.

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET OFFICE, Oct. 8th, 1885.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
Oct. 2	30·01	W.	52	49	80	60	47	...	Overcast
,, 3	29·87	N.W.	53	50	95	60	50	·05	Cloudy
,, 4	30·09	W.	49	47	67	60	44	...	Hazy
,, 5	29·73	W.	51	49	62	54	49	...	Overcast
,, 6	29·81	W.	47	44	63	57	42	·05	Fine
,, 7	29·73	N.W.	47	44	80	56	43	·67	Cloudy
,, 8	29·74	S.W.	47	45	...	53	41	...	Raining

Medical Diary for the ensuing Week.

Monday, October 12.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.
ST. MARK'S HOSPITAL.—Operations, 2 P.M., and on Tuesdays at the same hour.
HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CHELSEA HOSPITAL FOR WOMEN.—Operations, 2.30 P.M. Also on Thursdays at 3 P.M.

Tuesday, October 13.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.
ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.
CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.

Wednesday, October 14.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.
MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M., and on Saturday at the same hour.—Ophthalmic Operations on Tuesdays and Thursdays at 1.30 P.M.
ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department: 9.30 A.M., on Tuesdays and Fridays.
ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M., and on Saturday at the same hour.
LONDON HOSPITAL.—Operations, 2 P.M., and on Thursday and Saturday at the same hour.
GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department: 1.45 P.M.; Saturday, 9.15 A.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.
ROYAL MICROSCOPICAL SOCIETY.—8 P.M. Dr. Maddox: On the Feeding of Insects with Bacilli.—Mr. T. B. Rosseter: On the Gizzard of the Larvæ of Corethra Plumicornis.
BRITISH GYNÆCOLOGICAL SOCIETY.—8.30 P.M. Specimens will be shown by Dr. Fancourt Barnes, Mr. Reeves, and others.—Dr. Jamieson: Ruptured Perineum.—Dr. Heywood Smith: Hernia of the Ovary.

Thursday, October 15.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.
OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.—8 P.M. Living Specimens.—8.30 P.M. Mr. W. Lang: (1) Detached Retina in Yellow Spot Region Reshown; (2) Pemphigus of Conjunctiva.—Mr. Spencer Watson: Granular Lids and Vascular Cornea treated by Peritomy.—Dr. J. B. Lawford: Tuberculosis of Choroid.—Mr. G. Anderson Critchett: A case of Orbital Cellulitis.—Mr. Walter Jessop: On a case exhibiting Definite Movements of the Pupils with the Action of the Extrinsic Muscles of the Eye.—Mr. E. Nettleship: A case of Fatal Meningitis after Excision of the Eyeball.—Mr. Simeon Snell: Foreign Bodies in the Back Part of the Eye with Preservation of Sight.
HARVEIAN SOCIETY OF LONDON.—8.30 P.M. Mr. A. Q. Silcock: (1) A case of Iodic Purpura; (3) Specimen of Pyo-salpinx.—Dr. W. B. Cheadle: The Treatment of Chorea.

Friday, October 16.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.
SOCIETY OF MEDICAL OFFICERS OF HEALTH.—8 P.M. Dr. W. H. Corfield (President): The History of House Sanitation.

Saturday, October 17.

KING'S COLLEGE HOSPITAL.—Operations, 1 P.M.
ROYAL FREE HOSPITAL.—Operations, 2 P.M.
MIDDLESEX HOSPITAL.—Operations, 2 P.M.

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe, or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

LEGISLATION ON LUNACY AT THE ANTIPODES.

IN view of the long-expected report by the Lunacy Commissioners in Australia, the *Australian Medical Journal* thinks there is ground for hoping that before long the whole control of the lunacy department will be vested in a board in which the medical profession will have full and fair representation. The result of the general inquiry so far has, it appears, shown it to be absolutely necessary that the medical superintendents should be entrusted with full control over the warders and other subordinate officers.

Mr. A. H. Boys will find the answer to his question in our issue of Aug. 8th, p. 276.

Mr. J. F. de Alford.—We cannot depart from our rule, as given in a general notice at the head of this column.

SEWER VENTILATION.

To the Editor of THE LANCET.

SIR,—Your complaint of the emanations from the open grates in the streets of London in your issue of the 3rd inst. might be applied to most other towns. The abominably evil odours are the scandal and opprobrium of the modern drainage system, and work infinite mischief. Surveyors are content if their drains are relieved of their poisonous gases; if they are only a little worse than the streets they are satisfied. It does not appear to trouble them if the streets are only a little better than the drains. Iron tubes have everywhere failed; because they are as often downcast as upcast shafts—oftener, in fact; their action depending on their temperature. The only trustworthy plan is to exhaust the sewers forcibly, which I propose to do by the following simple arrangement, devised and patented by me last year. I connect the drain with the hollow lamp standard, conduct the foul air through the lantern by a central reflecting tube, fix a nearly horizontal reflector above the flames, and place about four pounds of charcoal, supported by wire gauze, in the upper part of the lamp. Thus, first, all light is reflected into the street; secondly, all germ-life is destroyed by being subjected to about four hundred degrees of heat; thirdly, the foul air is forcibly expelled and filtered through the charcoal, which is always active because always dry. The waste heat of the gas-flames answering all these useful purposes, the lamps being about as numerous, the street openings are thus turned into what they should be—viz., inlets. The solution of this problem stands second only in importance to that of the disposal of sewage. To the inhabitants of towns it is even more important. I am now exhibiting at the Sanitary Exhibition in Leicester such a lamp as I have above described. The extra cost of fitting is nominal, the chief expense being the very efficient reflector, which holds the flames steady and prevents any waste of light.

I shall be pleased to furnish further particulars to those interested in the subject.

I am, Sir, yours faithfully,

Loughborough, Oct. 5th, 1885. WILLIAM PAULSON, L.R.C.P.Lond.

ASYLUM PLANS.

To the Editor of THE LANCET.

SIR,—I see that you notice with approval the fact that in the annual report of the Cane Hill Asylum the plans of the asylum are given, and you seem to think that this is a new departure. Will you therefore allow me space to point out that the full plans of this asylum were published in the annual report for 1863, Dr. Lockhart Robertson, the present Senior Lord Chancellor's Visitor, being then Medical Superintendent.

I am, Sir, your obedient servant,

S. W. D. WILLIAMS, M.D.

County Asylum, Hayward's Heath, Oct. 5th, 1885.

*** This is only one more proof of Dr. Robertson's claim to be regarded as a great authority and a most accomplished administrator. We hope that so good an example will be universally followed.—ED. L.

DISINFECTION OF CATTLE CARS.

DR. P. REDARD, Physician-in-Chief of the State Railroads of France, has recently published the results of some experiments made by him to determine the true value of certain means of disinfection which are used in Europe to purify cars which have been used for the transportation of cattle. In France and several other countries the car is roughly cleansed and then washed with solutions of carbolic acid or chloride of zinc. In Germany, Austria, and Russia, on some lines chemical disinfectants have been abandoned, and jets of steam used instead. The experiments of Dr. Redard show that solutions of carbolic acid or of chloride or sulphate of zinc must be much stronger, and remain a much longer time in contact with the substances to be disinfected than can be the case in using these fluids in cattle cars. In almost every experiment with these substances the contagious properties of the virus of glanders, of anthrax, and of chicken cholera were not destroyed, and in every experiment with sulphurous acid gas it was found to be useless. No trials seem to have been made of the powers of a solution of bichloride of mercury, and the conclusion of Dr. Redard, that "the method of disinfecting cars by chemical substances is absolutely useless," seems premature; but there is no doubt that, as heretofore practised, it is of very little use. His experiments with the steam-jet gave the same results. The temperature of the jet used was from 80° to 90° C., and this did not destroy the vitality of the virus of chicken cholera, anthrax, septicæmia, or glanders. He then proceeded to try the effects of superheated steam at a temperature of 230° F., and found that, with one exception, this destroyed all the contagion referred to above. The superheating was effected in a small coil of iron pipe through which steam from the locomotive was passed, heat being applied externally. Dr. Redard concludes by recommending the use of this superheated steam process for disinfecting cattle cars, and the abandonment of the processes heretofore employed.

Mr. Fred. Hall.—Perhaps the Australasian Medical Directory and Handbook, published by Messrs. Baillière, Tindall, and Cox, King William-street, Strand, would answer our correspondent's purpose.

An Old Governor's letter will appear next week.

THE EARL OF SHAFTESBURY AND THE AFTER-CARE SOCIETY.

To the Editor of THE LANCET.

SIR,—It may interest some of your readers who are concerned in the welfare of the infirm in mind, to know that Lord Shaftesbury as late as 1879, when he was seventy-eight years old, kindly consented to be President of the Association of Friends of the Infirm in Mind. In answer to a communication which had been previously made to him, he observed "the subject has long been on my mind"; and he expressed his willingness to serve on the Society under the chairmanship of Dr. Bucknill, in whose house the association was founded. Lord Shaftesbury's acceptance of the presidentship was not merely formal. At four successive anniversary meetings (1881–1884, held at the houses successively of Sir Andrew Clark, Dr. Ogle, Lord Cottesloe, and Lord Brabazon), he personally presided, and took an active interest in the discussions. At the last meeting of the After-Care Association at which he was present, he remarked that he considered a home a necessity, and did not see how such a resort could be dispensed with. Earlier in the year his secretary had written: "I am directed by his lordship to say he is decidedly in favour of a home for Friendless Female Convalescents on leaving lunatic asylums." Lord Shaftesbury was too unwell to attend the annual meeting this year at Bethlem Hospital, where, by the kindness of Dr. Savage, an adjourned meeting will take place on Thursday October 29th, at 3 P.M.—I am, Sir, yours faithfully

HENRY HAWKINS,
Hon. Sec., After-Care Association.

Chaplain's House, Colney Hatch, N., Oct. 7th, 1885.

"THE DISAPPEARANCE OF BIRDS FROM CHOLERA DISTRICTS."

To the Editor of THE LANCET.

SIR,—In your issues of Sept. 19th (page 553) and Sept. 26th (page 603) reference is made to the sudden disappearance of birds at the outbreak of cholera in a fresh district. A remarkable instance of this kind is mentioned by Sir Thos. Watson, in his Lectures on Physic (vol. ii., page 585):—

"*Extract from the 'Dublin Morning Register' respecting the epidemic of 1832.*—A Westport correspondent, upon whose veracity we place reliance, has communicated to us the following extraordinary fact. In the demesne of the Marquis of Sligo, near Westport House, there is one of the largest rookeries in the West of Ireland. On the first or second day of the appearance of cholera in this place I was astonished to observe that all the rooks had disappeared; and for three weeks, during which the disease raged violently, these noisy tenants of the trees completely deserted their lofty habitations. In the meantime the revenue police found immense numbers of them lying dead upon the shore near Erris, about ten miles distant. Upon the decline of the malady within the last few days several of the old birds have again appeared in the neighbourhood of the rookery; but some of them seemed unable from exhaustion to reach their nests. The number of birds now in the rookery is not a sixth of what it was three months ago."

I am, Sir, yours faithfully,

Hanover-square, W., Oct. 5th, 1885. WM. A. MAGGS.

BEST COPY AV

"SEPTEMBER FATIGUE."

To the Editor of THE LANCET.

SIR,—Amongst the annotations in your issue of Sept. 26th I find one on the above subject—a subject in which I am, and have been for many years, especially interested, as possessing and indulging in the Englishman's innate love of sport, to which you refer.

Horace, in one of his epistles, tells us of the many and various tastes of individual men in seeking as a means of recreation and pastime some selected occupation; and I cannot regret that shooting has been my chosen and adopted habit through a long life for the support of health and for the refreshment of energy in the course of a long medical practice, necessarily and naturally associated with anxiety and heavy responsibility, and requiring for relief some one or more of the ordinary amenities of life. Indeed, I must be thankful in my own choice as a sportsman; for through my unusually long period of over fifty-five years spent in medical practice I have not known a day's illness—a blessing, truly!—which I attribute to the fact that I have been a regular payer of the game duty for the last fifty-four years in succession, or without intermission. Although it has not been my good fortune as a country surgeon to become a landowner after long exertion as the result of professional gains, yet we may, and do, find in our tastes for sporting this great and valued recompense—that by faithful and studious discharge of professional duties we make "troops of friends" among land-owning patients, ready to acknowledge the value of medical services by granting the privilege of shooting. I have therefore been contented and happy, as placed in this country district for the long term of fifty-five years as my *field* of practice, never leaving the district through that long period, excepting on one occasion, when, in 1860, I was absent in Ireland (county Mayo) for the purpose of grouse-shooting.

I trust this letter will not be deemed inadmissible to your columns through a semblance of egotism or self approval on my part. I make the communication for the encouragement of others who may be disposed to take to country practice without the glitter and the show of riches as the result of his labours, but with the satisfaction of knowing that he can discharge the functions of his useful and important mission—happy, indeed, that in such sphere of action contentment and a lengthened measure of health may be obtained, while with a competency for old age he may know and value this old and welcome proposition: "Pauper enim non est, cui rerum suppetit usus."

I am, Sir, your obedient servant,

St. Columb, Cornwall, Sept. 28th, 1885. WM. MOORMAN, M.R.C.S., &c.

X. X. and *J. E. D.*—We cannot deal with communications that are unaccompanied with the name of the writer.

Dr. J. Polak (Warsaw).—We regret we are unable to comply with the request.

"AN ABNORMAL HEN'S EGG."

To the Editor of THE LANCET.

SIR,—I would refer "Medical Student" to the *Science Monthly Illustrated* for May, 1884, page 212 (vol. i., No. 7) for a description, and suggested explanation, of just such an egg as he describes in THE LANCET of Sept. 26th. I may add that five similar cases are described also in the Catalogue of the Teratological Series of the Royal College of Surgeons.

I remain, Sir, your obedient servant,

Enfield, Oct. 1st, 1885. W. B. KESTEVEN, M.D.

To the Editor of THE LANCET.

SIR,—In answer to the letter of "Medical Student" on "An Abnormal Hen's Egg," I may state that I have notes of two cases among canaries. In one case three birds were hatched out of two eggs, and in the other five out of four eggs. "This uncommon fecundity on the part of the canary or other domesticated bird is," we are told, "exceedingly rare, although eggs of birds in their wild state have frequently been found containing two yelks." The explanation may probably be found in the fact that one ovulum has become included within another prior to the extrusion from the ovisac; though how the inner egg received a cretaceous covering, if such it really had, it is not easy to understand, since this is not added until the yelk, covered with its many layers of albumen and surrounded by the membrana putaminis, arrives at the last portion of the oviduct.

I am, Sir, yours truly,

Croydon, Oct. 5th, 1885. T. B. B.

Dr. Arthur H. Hassall.—We do not see any reason why a physician should not attach his full name to his prescriptions.

READY METHOD OF APPLYING DRESSINGS TO THE PERINEUM.

To the Editor of THE LANCET.

SIR,—Would you kindly allow me to draw attention to a ready method of applying dressings to the perineum.

Take an ordinary elastic cricket-belt. Buckle it round the waist next the skin. Any handkerchief tied before and behind passing between the legs will furnish a perineal bandage, for which I claim the following advantages:—The belt, being elastic, yields readily to any strain, and thus accommodates itself to all changes of posture, without altering the position of the handkerchief with reference to the part whereon the dressing is applied. It is to be found in almost every house; it is easily adjusted; and it does not in any way interfere with locomotion, or with the free movement of the abdominal muscles.

I am, Sir, yours truly,

Larnaca, Sept. 12th, 1885. J. G. LAYTAN.

"PRACTICE IN AUSTRALIA."

To the Editor of THE LANCET.

SIR,—In reply to "Old Subscriber" (THE LANCET, Sept. 26th), I can give him information relating to Victoria only.

In a town 120 miles from Melbourne, with a population of 5000 and upwards, in which I lived for some months, there was a district hospital, which could receive forty patients. The post of resident surgeon to this institution was worth £200 a year in salary, in addition to "all found." Private practice was allowed with the exception of midwifery, and then only in consultation. As visiting and consulting fees are good (10s. a visit), and mileage about the same—viz., 10s. a mile in addition, a fair income could be made. There were two private practitioners resident in the town, who held between them the club appointments and those of public vaccinator and medical officer of health. The clubs were managed upon a different plan from those in England. The members of the lodges—Odd Fellows, &c.—paid about 17s. to 20s. annually a head to the medical officer, which included attendance upon their wives and families, and, in addition, 5s. a head or more to the druggists for their medicine. There is no dispensing done in the towns by the medical men, and in this place there were two chemists. When the lodges amalgamated they advertised for tenders from medical men to undertake the work at so much a head, and a stranger took them at 15s. a head, I believe; as a consequence both the resident practitioners left the place. The visiting radius was two or three miles only from the town. Club appointments may, I have no doubt, be obtained from time to time, and district hospitals—of which there are a good number in the colony—are, of course, occasionally advertised. "Old Subscriber" should write for the *Melbourne Argus* at the London Office, Fleet-street, and he will see what kind of appointments are vacant. In new districts opportunities of making a practice occur; but in the large towns—Melbourne, Ballarat, Sandhurst, and Geelong—there are plenty of medical men, and your correspondent should have private means if he intends to live in one of these. Finally, if his health compels the change, or his purse allows it, he will very likely make a living, and perhaps a good income.

I am, Sir, yours truly,

Oct. 6th, 1885. PER MARE PER TERRAS.

H. J.—The question is not very clearly put. By the recent Act it is made a felony for a male person to have carnal knowledge of a female under thirteen, with or without consent; and a misdemeanour in the case of a female between thirteen and sixteen even with consent.

THE HABIT OF MORPHIA-TAKING.

To the Editor of THE LANCET.

SIR,—Can any of your numerous readers give me any hints as to the treatment of the following case?

My patient has unfortunately acquired the habit of morphia-taking, and though most sincerely and honestly anxious to relinquish it, the suffering induced by the cessation of its use even for a single day are so truly agonising that, although possessed of a very fair average amount of firmness and self-denial, he is always obliged to return to his enemy for relief. All the drugs that I have tried as substitutes seem to be quite useless, and I shall be greatly obliged for advice as to any line of treatment to be adopted, or any drug or drugs to be used as a substitute to in some measure relieve the sufferings until the habit can be finally abandoned. I may add that the dose (as compared to some I have heard of) has never been very excessive, from four to five grains of the acetate being the most that has usually been taken in the twenty-four hours.

I am, Sir, yours faithfully,

September 13th, 1885. H. C.

A Subscriber.—The duties of a medical officer of health, if he holds his appointment under the Order of the Local Government Board, are limited to those specified in the instructions of that Order, to which we must refer our correspondent.

Compiler.—By far the best discussion of the subject is to be found in Dr. Edward Ballard's work, "Vaccination, its Value and Alleged Dangers," published by Longmans, Green, and Co. The book, we believe, is out of print, but copies can be had from the libraries.

WEIGHING MACHINE.

To the Editor of THE LANCET.

SIR,—In answer to the letter of "Subscriber" in your last issue, I beg to say that I have used for the last three years a machine which I got from T. Hawksley, 357, Oxford-street (opposite Marylebone-lane). It cost £5 5s., and I find it answers very well. I got it because it was recommended by Mr. Roberts in his interesting book on Anthropology. I keep the machine in my consulting-room, and I have weighed and measured 1342 people, some oftener than once.

I may add that I keep a book in which I register name, age, height, span of arms, weight, chest-girth, colour of eyes, colour of hair, colour-blindness, sight, place of birth, with remarks.

I remain, Sir, yours truly,

Watford, Herts, Oct. 8th, 1885. ALFRED THOMAS BRETT, M.D.

Ganglion Impar.—Our correspondent will have to pass some examination; but the curriculum he has gone through should secure for him respectful treatment at the hands of the examining authorities of the States.

Mr. Windley's letter is unavoidably held over till next week.

COPY AVAILABLE

URTICA DIOICA.

To the Editor of THE LANCET.

SIR,—In THE LANCET of this day, at page 647 is a communication from "Our own Correspondent" at Berlin, giving an account of a new styptic—the juice of nettles. This is no new thing. At page 754 of "The Family Herbal," by Dr. Robert John Thornton, M.D., Member of the University of Cambridge, and of the Royal College of Physicians of London, published in 1814, it says: "Nettle broth is good against the scurvy. The expressed juice, given a tablespoonful four times a day, stops hæmoptysis, and lint dipped in it and forced up the nostrils has stopped bleeding of the nose when every other remedy has failed. Cancers have been said to have yielded to the juice of nettles, as much being taken as four ounces a day. The seeds produce a fine oil, and taken inwardly in moderate quantity excite the system, especially *les plaisirs de l'amour*, and are very forcing, therefore should be cautiously used. Excessive corpulency may be reduced by taking a few of these seeds daily. Lastly, fourteen or fifteen of these seeds made into a powder and taken night and morning will cure the goitre, without injuring the stomach or health."—I am, Sir, your obedient servant,

Torrington-square, W.C., Oct. 3rd, 1885. JOHN MALCOLM, F.R.C.S.

Zeus of Elea's communication on medical reform will probably appear next week.

"THE COMMUNION CUP."

To the Editor of THE LANCET.

SIR,—I can fully endorse the remarks of "Medical Officer of Health" which appeared in your issue of the 26th ult. upon the above subject. The last time that my wife and I partook of the sacred ordinance we both noticed among the communicants a young footman in livery. Very shortly afterwards I received incontestable evidence that this same young man was suffering from gonorrhœa and acute orchitis. Had it been mucous patches about the mouth and throat instead, it would have been all the same; as to this class of patient, a scalding of the penis and swelling of the testicle would be of far more serious import than a few slight sores about the mouth. I remain, Sir, yours truly,

Oct. 3rd, 1885. J. H. N.

"THE DEVIL'S BIT."

To the Editor of THE LANCET.

SIR,—With your permission, I would like to bring under the notice of medical practitioners a flower which, in a certain sense at least, has hitherto been "blushing unseen." I allude to the devil's bit (*Scabiosa succisa*). Quite recently, while in a very secluded corner of the far north, I discovered that the natives use the root of this plant as a remedy for jaundice. A small quantity of the infusion is taken in milk. I have consulted several Pharmacopœias, but nowhere do I find it recommended for anything like this purpose. Hence these few lines.

I am, Sir, yours truly,

Sept. 29th, 1885. IGNORAMUS.

THE BRADLEY FUND.

To the Editor of THE LANCET.

SIR,—Please acknowledge the following contributions in the next issue of your journal. As it has been decided to close the subscription list on Monday, Oct. 26th, I shall be glad if those gentlemen who have not already paid their subscriptions will kindly forward me their cheques as soon as convenient. I remain, Sir, yours faithfully,

Eastwood House, Chesterfield, Oct. 7th, 1885. RICHARD JEFFREYS.

Mr. Alfred Willett	...	£3	2	0	Mr. Matthew Hallwright	£1	1	0
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M.R.C.S. (Llanfair).—The details given of the case are hardly sufficiently full, we think, to elicit useful suggestions.

Mr. G. Taylor might by advertising meet with a customer for his book.

Mr. E. Harrison (Hull) is thanked for his communication.

COMMUNICATIONS not noticed in our present number will receive attention in our next.

COMMUNICATIONS, LETTERS, &c., have been received from—Sir Henry Thompson, London; Dr. Broadbent, London; Dr. Brailey, London; Mr. Pye-Smith, Sheffield; Mr. Holmes, London; Dr. Heywood Smith, London; Dr. Kesteven, Enfield; Mr. Gamgee, Birmingham; Mr. G. Taylor, London; Dr. Hassall, Lucerne; Mr. Boys, Pill; Mr. Malcolm, London; Dr. Wallace Anderson, Glasgow; Dr. S. W. D. Williams, Hayward's Heath; Dr. Braxton Hicks, London; Mr. C. G. Lee, Liverpool; Mr. Poland, London; Mr. E. Harrison, Hull; Dr. Hamilton, Glasgow; Dr. Handford, Nottingham; Mr. Maggs, London; Mr. G. Mundle, Hampton; Mr. Byles, Eccles Hill; Mr. Paulson, Mountsorrel; Mr. T. Windley, Leicester; Dr. Hadden, London; Mr. H. A. Rawlins, London; Mr. O. Hehner, London; Messrs. Wright and Co., London; Mr. Jennings, London; Mr. Tunmer, Harrogate; Mr. Scott, Berwick-on-Tweed; Messrs. Smith and Son, Birmingham; Mr. Low, Plumstead; Messrs. Waite and Co., New York; Messrs. Wood and Co., New York; Mr. Husband, Leeds; Mr. Petter, Yeovil; Mr. Twyford, Hanley; Mr. Tyffe, London; Mr. Bowlby, London; Messrs. Woodhall and Co., Oswestry; Dr. Courtot, Salem; Mr. Blair, Leeds; Dr. Adam, West Malling; Mr. Heywood, Manchester; Messrs. W. H. Smith and Son, Dublin; Mr. Hearne, Oldham; Mr. Godfrey, Northampton; Mr. Packer, Worcester; Mr. Saxon Snell, London; Mr. Newsholme, Sheffield; Mr. Heard, Truro; Mr. Harper, London; Dr. Barr, Glasgow; Mr. Palm, Chard; Dr. Prosser James, London; Dr. Saundby, Birmingham; Dr. Illingworth; Mr. Berry, Grantham; Dr. Mackey, Brighton; Mr. Abbotts; Dr. Tetley, Keighley; Messrs. Burroughs and Co., London; Rev. H. Hawkins, Colney Hatch; Messrs. Squire and Son, London; Mr. Cripps, London; Mr. Hilton, Berry; Mr. Howe, Manchester; Mr. Mackay, Greenock; Mr. Menzies; Zeno of Elea; J. H. N.; M.R.C.S.; H. W. M., Newcastle-on-Tyne; A Reader for Twenty Years; H. C.; A Subscriber; Medicus, Edinburgh; W. N.; Medicus, Liverpool.

LETTERS, *each with enclosure*, are also acknowledged from—Mr. Williams; Mr. Crawshaw, Ramsbotham; Mr. Ricks, Bedford; Mrs. Chreiman, W. Kensington; Dr. Eberle, Thirsk; Mr. Lockwood; Mr. Lawson, London; Miss De Luttichau, Holloway; Mr. Heaton; Mr. White, Bayswater; Miss Sidney, Brighton; Mr. Aveling, Paddington; Mr. A. Waller, London; Mrs. Brutel, Hammersmith; Mr. Pilkington, Ormskirk; Miss Penning, Torquay; Dr. Garland, Yeovil; Mr. Barnasioni, Plymouth; Messrs. Porteus and Co., Glasgow; Messrs. Macmillan and Co., London; Mr. Burgess; Miss Towson, Chester; Mr. Hopgood, Stow-on-the-Wold; Mr. Scott, Manchester; Messrs. Lee and Martin, Birmingham; Mr. Walker, Liverpool; Mr. Warren, New Brompton; Mrs. Wenlock, Lowestoft; Mr. Woodhouse, Manchester; Dr. Kidd, London; Mr. Harcourt; Mr. Andrews, Winchester; Mr. H. Kimpton, London; Mr. Harwood, Burnley; Dr. Newell, Macclesfield; Mr. Evans, Crook; Mr. Evans, Oswestry; Mr. Harley, Greenock; Mrs. Carson, Burton-on-Trent; Medicus, Kirton; A. B., London; Theta, Derby; Medicus, Bishop Auckland; L. R. R., London; W. L. A.; R. F. G., Whitby; M.R.C.S., Chelsea; Surgeon, Notts; Lady Superintendent, Glasgow; Medicus, Southport; Medicus, Ipswich; The Treasurer, Rotherham Hospital; Medicus, Minchinhampton; B., W. Brighton; A. L.; Delta, Clapham Junction; M.R.C.S., Fulham; Cantab., Bayswater; C. D., London; H. R. N.; J. C., Chesterfield; C. H., West Kensington; G., Ashnough; Peritus, Exeter.

Westerham Herald, Iron, Aberdeen Free Press, Health Journal, Zdrowie, Southport Visitor, Holy Trinity (Windsor) Monthly Magazine, Leeds Mercury, Religious Opinion, Newcastle Daily Leader, Sunderland Herald and Daily Post, Lancaster Guardian, Lakes Chronicle, &c., have been received

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